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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Thomas S. Heard Examiner #: 80541 Date: 12/28/09
Art Unit: 1654 Phone Number: 2-2064 Serial Number: 10/530,646
Location (Bldg/Room): REM 3C18 Mail Box #: REM 3C18 Results Format Preferred (circle): PAPER DISK

To ensure an efficient and quick search, please attach a copy of the one or more claims, abstract or full text the following:

Title of Invention: See attached Bib Data Sheet

Inventors (please provide full names): See Attached Bib Data Sheet

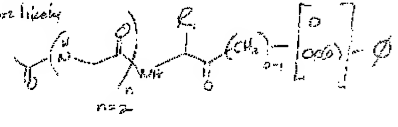
Earliest Priority Date: See Attached Bib Data Sheet

Search Topic
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Structure Search.

Please search claim 1.
Case most likely



Thank you

LB

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FILE COVERS 1907 - 28 Dec 2009 VOL 152 ISS 1
FILE LAST UPDATED: 25 Dec 2009 (20091225/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAplus now includes complete International Patent Classification (IPC)
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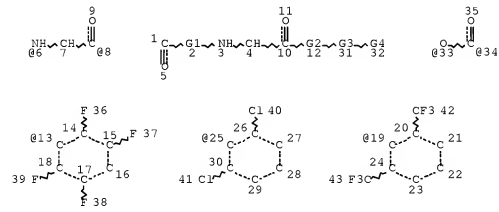

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE
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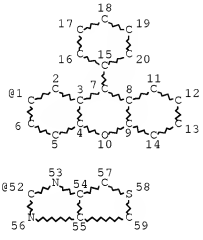

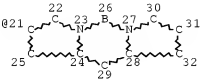

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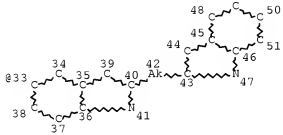

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STEREO ATTRIBUTES: NONE
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L22  ANSWER 1 OF 33  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2008:352859  CAPLUS  Full-text
DOCUMENT NUMBER:          148:394354
TITLE:                    Compositions and methods for treatment of viral
                          diseases
INVENTOR(S):              Johansen, Lisa M.; Owens, Christopher M.; Mawhinney,
                          Christina; Chappell, Todd W.; Brown, Alexander T.;
                          Frank, Michael G.; Altmeyer, Ralf
PATENT ASSIGNEE(S):       Combinatorx (Singapore) Pre. Ltd., Singapore
SOURCE:                   PCT Int. Appl., 237pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
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     WO 2008033466        A2    20080320    WO 2007-US19932          20070913
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             BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     US 20080161324       A1    20080703    US 2007-900893           20070913
PRIORITY APPLN. INFO.:                     US 2006-844463P     P    20060914
                                           US 2006-874061P     P    20061211
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB   Based on the results of the authors screen identifying compds. and
     combinations of compds. having antiviral activity, the present invention
     features compns., methods, and kits useful in the treatment of viral diseases.
     In certain embodiments, the viral disease is caused by a single stranded RNA
     virus, a flaviviridae virus, or a hepatic virus.  In particular embodiments,
     the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B,
     hepatitis C, hepatitis D, hepatitis E).  Also featured are screening methods
     for identification of novel compds. that may be used to treat a viral disease.
CC   1-5 (Pharmacology)
IT   50-35-1, Thalidomide   50-41-9, Clomiphene citrate   50-55-5, Reserpine
     50-63-5, Chloroquine phosphate   50-91-9, Floxuridine   51-21-8,
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Fluorouracil 51-24-1, Tiratricol 51-45-6, Histamine, biological studies 53-19-0, Mitotane 53-43-0, Dehydroepiandrosterone 53-60-1, Promazine hydrochloride 54-42-2, Idoxuridine 55-03-8, Levothyroxine sodium 55-86-7, Mechlorethamine hydrochloride 56-47-3, Desoxycorticosterone acetate 56-53-1, Diethylstilbestrol 56-92-8, Histamine dihydrochloride 58-18-4, Methyltestosterone 58-22-0, Testosterone 58-61-7D, Adenosine, carboxylic derivs. 60-56-0, MM I 61-12-1, Dibucaine hydrochloride 61-19-8D, Adenosine monophosphate, L HSA derivs. 61-82-5, Amitrole 63-25-2, Carbaryl 65-49-6, p-Aminosalicylic acid 66-81-9, Cycloheximide 67-92-5, Dicyclomine hydrochloride 68-19-9, Vitamin B12 68-88-2, Hydroxyzine 70-00-8, Trifluridine 83-70-5, Vitamin K5 83-89-6, Quinacrine 84-17-3, Dienestrol 88-58-4, BHQ 94-09-7, Benzocaine 96-84-4, Iophenoxic acid 97-00-7, Dinitrochlorobenzene 97-77-8, Disulfiram 103-16-2, Monobenzone 113-52-0, Imipramine hydrochloride 118-42-3, Hydroxychloroquine 119-04-0D, Neomycin B, arginine conjugates 123-31-9, Hydroquinone, biological studies 123-77-3, Azodicarbonamide 126-07-8, Griseofulvin 127-07-1, Hydroxycarbamide 128-13-2, Ursodeoxycholic acid 128-62-1, Noscapine 129-46-4, Suramin sodium 132-17-2, Benztropine mesylate 132-69-4, Benzydamine hydrochloride 136-40-3, Phenazopyridine hydrochloride 137-26-8, Thiram 137-53-1, Dextrothyroxine sodium 146-56-5, Fluphenazine hydrochloride 147-94-4, Cytarabine 148-82-3, Melphalan 150-76-5, Mequinol 151-21-3, Sodium laurylsulfate, biological studies 152-43-2, Quinestrol 152-62-5, Dydrogesterone 303-45-7, Gossypol 314-13-6, Evans Blue 321-64-2, Tacrine 339-72-0, Levcycloserine 362-07-2, 2-Methoxyestradiol 402-71-1 404-86-4, Capsaicin 440-17-5, Trifluoperazine hydrochloride 458-37-7, Curcumin 468-61-1, Oxeladin 481-49-2, Cepharanthine 517-89-5, Shikonin 518-28-5, Podophyllotoxin 521-78-8, Trimipramine maleate 524-12-9, Wedelolactone 538-03-4D, Arsenoxide, glutathione derivs. 548-04-9, Hypericin 562-09-4, Chlorphenoxamine hydrochloride 569-65-3, Meclizine 616-91-1, Acetylcysteine 636-47-5, Stallimycin 637-58-1, Pramoxine hydrochloride 749-02-0, Spiperone 749-13-3, Trifluperidol 751-94-0, Sodium fusidate 768-94-5, Amantadine 881-68-5, Vanillin acetate 909-13-7, Dihydrocostatolide 969-33-5, Cyproheptadine hydrochloride 1229-29-4, Doxepin hydrochloride 1244-76-4 1393-48-2, Thiostrepton 1405-86-3, Glycyrrhizin 1405-97-6, Gramicidin 1424-00-6, Mesterolone 1621-55-2 1910-68-5, Methisazone 2068-78-2, Vincristine sulfate 2140-72-9 2169-75-7, Deptropine citrate 2210-63-1, Mofebutazone 2391-56-2, 1,5-Bis(4-aminophenoxy)pentane 2413-38-9, Flupentixol dihydrochloride 2438-72-4, Bufexamac 2753-45-9, Mebeverine hydrochloride 3039-71-2, U18666A 3056-17-5, Stavudine 3093-35-4, Halcinonide 3254-89-5, Diphenidol hydrochloride 3416-05-5 3424-98-4, Telbivudine 3572-43-8, Bromhexine 3572-60-9, Amidinomycin 3599-32-4, Indocyanine Green 3731-59-7, Moroxydine 4097-22-7, Dideoxyadenosine 4291-63-8, Cladribine 4991-65-5, Tioxolone 5154-02-9, 1,5-Isoquinolinediol 5398-51-6, NSC 4493 5466-77-3, Octyl Methoxycinnamate 5535-20-6, PD 0084430 5536-17-4, Vidarabine 5987-82-6, Benoxinate hydrochloride 6190-39-2, Dihydroergotamine mesylate 6485-39-8, Manganese gluconate 6493-05-6, Pentoxifylline 6873-13-8, Phellodendrine 7059-23-6, Methylglyoxal bis(guanylhydrazone) dihydrochloride 7081-38-1, Oxyphenbutazone monohydrate 7083-71-8, Emetine dihydrochloride hydrate 7235-40-7, Beta-Carotene 7481-89-2, Zalcitabine 7481-89-2D, Zalcitabine, Phosphatidyl derivs. 7689-03-4, Camptothecin 8067-24-1, Ergoloid mesylates 8077-15-4, F 36 9001-63-2, Lysozyme 9005-25-8, XP 951, biological studies 9031-94-1, Aminopeptidase 9032-43-3, Cellulose sulfate 9036-19-5, Octoxynol 9 9042-14-2, Dextran sulfate 9050-67-3, Sizofiran 9054-89-1D, Superoxide dismutase, lecithinized 10083-24-6, Piceatannol 10212-25-6, Cyclocytidine hydrochloride 10347-81-6, Maprotiline hydrochloride

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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods for treatment of viral diseases)

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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

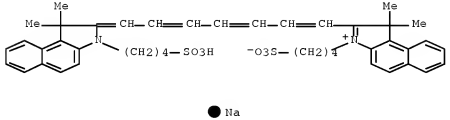
(compns. and methods for treatment of viral diseases)

IT 1015079-46-5 1015079-47-6 1015079-49-8 1015079-50-1 1015079-51-2 1015079-52-3 1015079-53-4 1015079-54-5 1015079-55-6 1015079-56-7 1015079-57-8 1015079-58-9 1015079-59-0 1015079-60-3 1015079-61-4 1015079-62-5 1015079-63-6 1015079-64-7 1015079-65-8 1015079-66-9 1015079-67-0 1015079-68-1 1015079-69-2 1015079-70-5 1015079-71-6 1015079-72-7 1015079-73-8 1015079-74-9 1015079-75-0

1015079-76-1 1015079-77-2 1015079-78-3 1015079-79-4 1015079-80-7
1015079-81-8 1015079-82-9 1015079-83-0 1015079-84-1 1015079-85-2
1015079-86-3 1015079-87-4 1015079-88-5 1015079-89-6 1015079-90-9
1015079-91-0 1015079-92-1 1015079-93-2 1015079-94-3 1015079-95-4
1015079-96-5 1015079-97-6 1015079-98-7 1015079-99-8 1015080-00-8
1015080-01-9 1015080-02-0 1015080-03-1 1015080-04-2 1015080-05-3
1015080-06-4 1015080-07-5 1015080-08-6 1015080-09-7 1015080-10-0
1015080-11-1 1015080-12-2 1015080-13-3 1015080-14-4 1015080-15-5
1015080-16-6 1015080-17-7 1015080-18-8 1015080-19-9 1015080-20-2
1015080-21-3 1015080-22-4 1015080-23-5 1015080-24-6 1015080-25-7
1015080-26-8 1015080-27-9 1015080-28-0 1015080-29-1 1015080-30-4
1015080-31-5 1015080-32-6 1015080-33-7 1015080-34-8 1015080-35-9
1015080-36-0 1015080-37-1 1015080-38-2 1015080-39-3 1015080-40-6
1015080-41-7 1015080-42-8 1015080-43-9 1015080-44-0 1015080-45-1
1015080-46-2 1015080-47-3 1015080-49-5 1015080-51-9 1015080-52-0
1015080-53-1 1015080-55-3 1015080-56-4 1015080-57-5 1015080-58-6
1015080-59-7 1015080-60-0 1015080-61-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods for treatment of viral diseases)

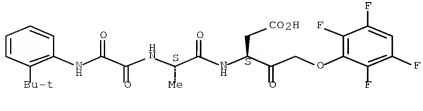
IT 3599-32-4, Indocyanine Green 254750-02-2, IDN 6556
1015079-08-9 1015079-21-6 1015079-27-2
1015079-31-8 1015079-33-0 1015079-55-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods for treatment of viral diseases)

RN 3599-32-4 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1) (CA INDEX NAME)



RN 254750-02-2 CAPLUS
CN L-Alaninamide, N-[2-(1,1-dimethylethyl)phenyl]-2-oxoglycyl-N-[(1S)-1-(carboxymethyl)-2-oxo-3-(2,3,5,6-tetrafluorophenoxy)propyl]- (CA INDEX NAME)

Absolute stereochemistry.

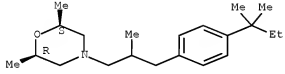


RN 1015079-08-9 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with rel-(2R,6S)-4-[3-[4-(1,1-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine (CA INDEX NAME)

CM 1

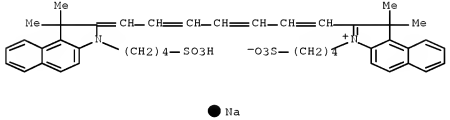
CRN 78613-35-1
CMF C21 H35 N O

Relative stereochemistry.



CM 2

CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na

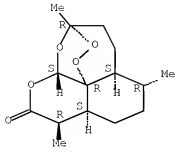


RN 1015079-21-6 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with (3R,5aS,6R,8aS,9R,12S,12aR)-octahydro-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10(3H)-one (CA INDEX NAME)

CM 1

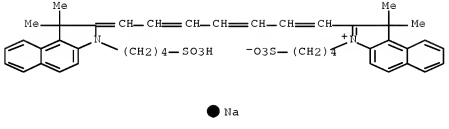
CRN 63968-64-9
CMF C15 H22 O5

Absolute stereochemistry.



CM 2

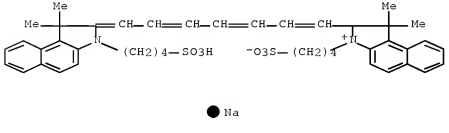
CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na



RN 1015079-27-2 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with 4,4'-[1,5-pentanediylbis(oxy)]bis[benzenamine] (CA INDEX NAME)

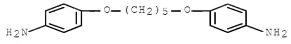
CM 1

CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na



CM 2

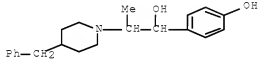
CRN 2391-56-2
CMF C17 H22 N2 O2



RN 1015079-31-8 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with α-(4-hydroxyphenyl)-β-methyl-4-(phenylmethyl)-1-piperidineethanol (CA INDEX NAME)

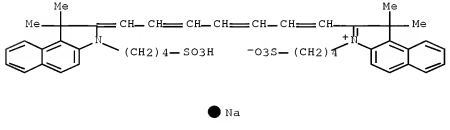
CM 1

CRN 23210-56-2
CMF C21 H27 N O2



CM 2

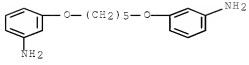
CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na



RN 1015079-33-0 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with 3,3'-[1,5-pentanediylbis(oxy)]bis[benzenamine] (CA INDEX NAME)

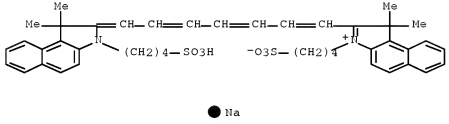
CM 1

CRN 109091-47-6
CMF C17 H22 N2 O2



CM 2

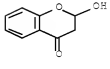
CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na



RN 1015079-55-6 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (1:1), mixt. with 2,3-dihydro-2-hydroxy-4H-1-benzopyran-4-one (CA INDEX NAME)

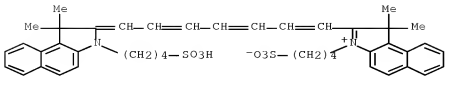
CM 1

CRN 57669-32-6
CMF C9 H8 O3



CM 2

CRN 3599-32-4
CMF C43 H48 N2 O6 S2 . Na



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1242827 CAPLUS Full-text
DOCUMENT NUMBER: 146:28352
TITLE: Water-soluble multi-biotin-containing compounds
INVENTOR(S): Wilbur, D. Scott; Pathare, Pradip M.; Hamlin, Donald K.; Wan, Feng
PATENT ASSIGNEE(S): University of Washington, USA
SOURCE: U.S., 98pp., Cont.-in-part of U.S. Ser. No. 324,267, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 7141676	B1	20061128	US 2002-261040		20020930	<--
US 20060228325	A1	20061012	US 2006-435963		20060517	<--
US 20070071673	A1	20070329	US 2006-516419		20060906	<--
PRIORITY APPLN. INFO.:			US 1996-11321P	P	19960208	<--
			US 1997-798413	B2	19970207	<--
			US 1999-324267	B2	19990602	<--
			WO 1998-SE1345	A	19980707	<--
			WO 1999-SE1241	A	19990707	<--
			US 2000-750280	A1	20001229	<--
			US 2002-261040	A3	20020930	<--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Water-soluble discrete multi-biotin-containing compds. with ≥ 3 biotin moieties are disclosed. The water-soluble biotin-containing compds. may addnl. comprise ≥1 moieties that confer resistance to cleavage by biotinidase or that is cleavable in vitro or in vivo. The discrete multi-biotin-containing compds. may include a reactive moiety that provides a site for reaction with yet another moiety, such as a targeting, diagnostic or therapeutic functional moiety. Biotinylation reagents comprising water-soluble linker moieties are also disclosed and may addnl. comprise a biotinidase protective group. Methods for amplifying the number of sites for binding biotin-binding proteins at a selected target using multi-biotin compds. also are disclosed.

INCL 548303700; 424001650; 424-DIG.16; 424001110
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 9, 28, 63
ST dendrimer biotin polyamino acid trifunctional aryl prepn

IT Linking agents
(for biotin-containing compds.; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT Solid phase synthesis
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT Dendrimers
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 1067645-78-6 1067645-87-7 1067646-19-8
1067649-88-0 1067650-61-6 1067650-72-9
1067653-39-7
RL: PRPH (Prophetic)
(Water-soluble multi-biotin-containing compounds)
IT 915944-76-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(amidation; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 127457-76-5P 915944-77-3P 915944-87-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(dendron coupling; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 915944-75-1P 915944-79-5P 915944-83-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(hydrolysis; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 915944-80-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with hydrazine; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 915944-81-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with protected aminobenzoic acid; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 915944-84-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with thiophosgene; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 186020-66-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with tosyl chloride; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
IT 915944-74-0P 915944-86-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reduction; synthesis of water-soluble multi-biotin-containing compds.

for use in targeting biotin-binding proteins)

IT 194920-43-9P 194920-56-4P 194920-58-6P
194920-69-9P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)

IT 58-85-5, Biotin 74-89-5, Methyl amine, reactions
98-59-9, Tosyl chloride 99-05-8, m-Aminobenzoic acid 112-27-6, Triethylene glycol 302-01-2, Hydrazine, reactions 463-71-8, Thiophosgene 929-59-9 1074-82-4, Potassium phthalimide 1663-39-4, tert-Butyl acrylate 4246-51-9 4422-95-1, 1,3,5-Benzenetricarbonyl trichloride 4480-83-5, 1,4-Dioxane-2,6-dione 34619-03-9, Di-tert-Butyl carbonate 55750-48-6, N-Methoxycarbonylmaleimide 59085-15-3 125215-72-7D, dendrimers with biotins, polylysine, polyglutamic and polyaspartic acids 142685-25-4, 2,3,5,6-Tetrafluorophenyl trifluoroacetate 153086-78-3 915944-89-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)

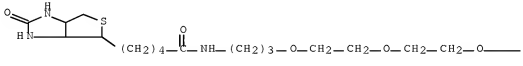
IT 111331-82-9P 173341-32-7P 175885-18-4P
183896-00-6P 183896-02-8P 194920-44-0P
194920-57-5P 194920-62-2P 194920-63-3P
194920-66-6P 217817-01-1P 217817-03-3P 217817-04-4P
217817-06-6DP, dendrimers with iodolabeledbenzoyl, polylysine, polyglutamic and polyaspartic acids 217817-06-6P
915944-73-9P 915944-78-4P 915944-82-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)

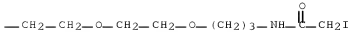
IT 915944-85-3P 915944-88-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)

IT 1067645-78-6 1067645-87-7 1067646-19-8
1067649-88-0 1067650-61-6 1067650-72-9
1067653-39-7
RL: PRPH (Prophetic)
(Water-soluble multi-biotin-containing compounds)

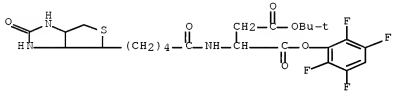
RN 1067645-78-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

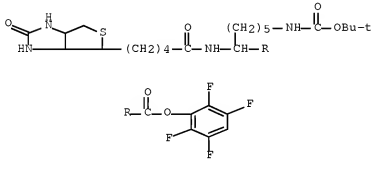




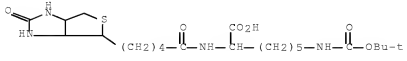
RN 1067645-87-7 CAPLUS
CN Aspartic acid, N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-, 4-(1,1-dimethylethyl) 1-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)



RN 1067646-19-8 CAPLUS
CN Heptanoic acid, 7-[[(1,1-dimethylethoxy)carbonyl]amino]-2-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

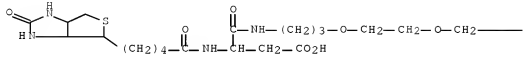


RN 1067649-88-0 CAPLUS
CN Heptanoic acid, 7-[[(1,1-dimethylethoxy)carbonyl]amino]-2-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]- (CA INDEX NAME)

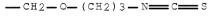


RN 1067650-61-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

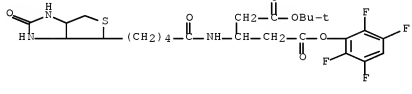
PAGE 1-A



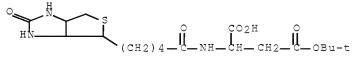
PAGE 1-B



RN 1067650-72-9 CAPLUS
CN Pentanedioic acid, 3-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-, 1-(1,1-dimethylethyl) 5-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)



RN 1067653-39-7 CAPLUS
CN Aspartic acid, N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-, 4-(1,1-dimethylethyl) ester (CA INDEX NAME)

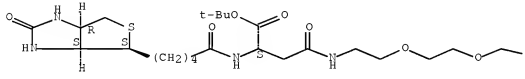


IT 915944-77-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(dendron coupling; synthesis of water-soluble multi-biotin -containing compds. for use in targeting biotin-binding proteins)
RN 915944-77-3 CAPLUS
CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid,

18-amino-18-[(16S)-16-[(1,1-dimethylethoxy)carbonyl]-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4,15,21,32-tetraoxo-, 1,35-bis(1,1-dimethylethyl) ester, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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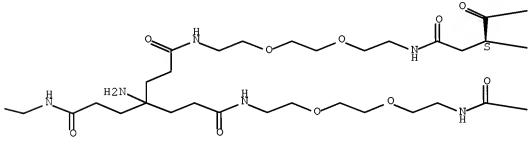
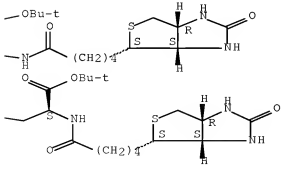


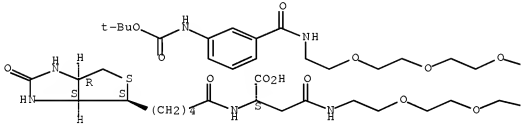
PAGE 1-C



IT 915944-83-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(hydrolysis; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
RN 915944-83-1 CAPLUS
CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid, 18-[(16S)-16-carboxy-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-18-[[14-[3-[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,14-dioxo-4,7,10-trioxa-13-azatetradec-1-yl]amino]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4,15,21,32-tetraoxo-, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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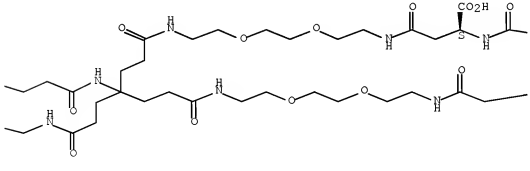

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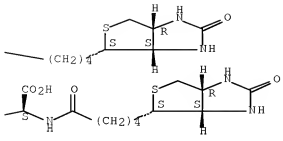
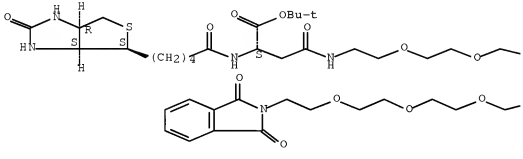


IT 915944-80-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with hydrazine; synthesis of water-soluble multi-biotin -containing compds. for use in targeting biotin-binding proteins)
RN 915944-80-8 CAPLUS
CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid, 18-[[3-[2-[2-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethoxy]ethoxy]ethoxy]-1-oxopropyl]amino]-18-[(16S)-16-[(1,1-dimethylethoxy)carbonyl]-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4,15,21,32-tetraoxo-, 1,35-bis(1,1-dimethylethyl) ester, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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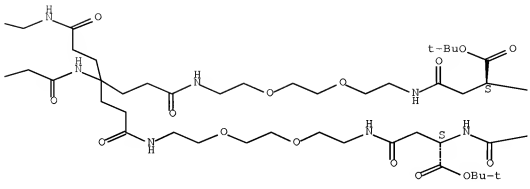

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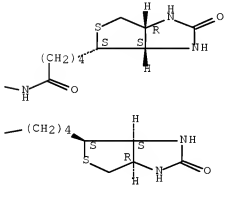


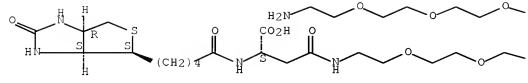
IT 915944-81-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with protected aminobenzoic acid; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)

RN 915944-81-9 CAPLUS

CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid, 18-[[3-[2-[2-(2-aminoethoxy)ethoxy]ethoxy]-1-oxopropyl]amino]-18-[(16S)-16-carboxy-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4,15,21,32-tetraoxo-, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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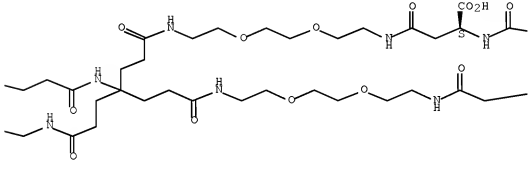

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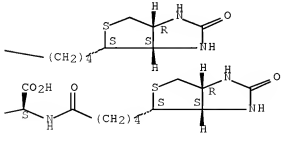
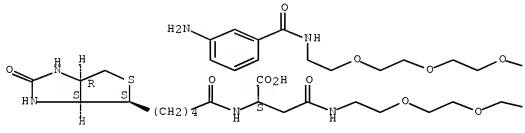


IT 915944-84-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction with thiophosgene; synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin

-binding proteins)
RN 915944-84-2 CAPLUS
CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid, 18-[[14-(3-aminophenyl)-1,14-dioxo-4,7,10-trioxa-13-azatetradec-1-yl]amino]-18-[(16S)-16-carboxy-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4,15,21,32-tetraoxo-, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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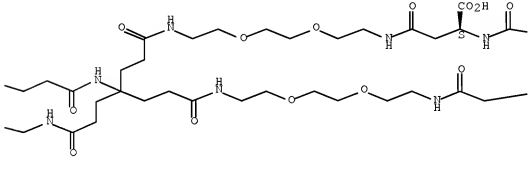

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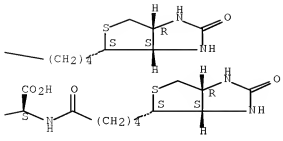

IT 194920-43-9P 194920-56-4P 194920-58-6P
194920-69-9P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
RN 194920-43-9 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[3-[2-[2-(3-aminopropoxy)ethoxy]ethoxy]propyl]hexahydro-2-oxo-, (3aS,4S,6aR)-, trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 183896-00-6
CMF C20 H38 N4 O5 S

Absolute stereochemistry.

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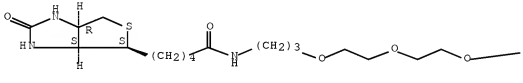

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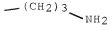


CM 2

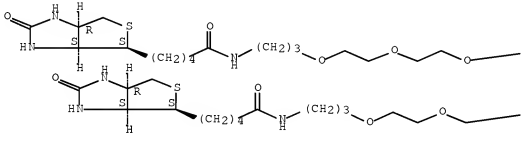
CRN 76-05-1

CMF C2 H F3 O2

RN 194920-56-4 CAPLUS
CN 1,3,5-Benzenetricarboxamide, N1,N3,N5-tris[19-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-oxo-4,7,10-trioxa-14-azanonadec-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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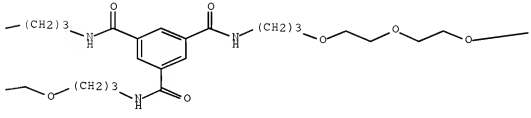

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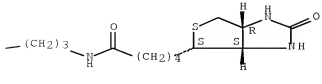
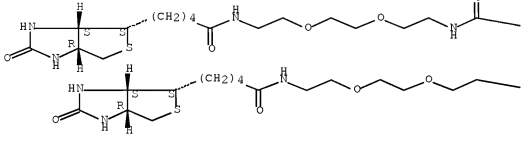


RN 194920-58-6 CAPLUS
CN 1,3,5-Benzenetricarboxamide, N1,N3,N5-tris[2-[2-[2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]ethoxy]ethoxy]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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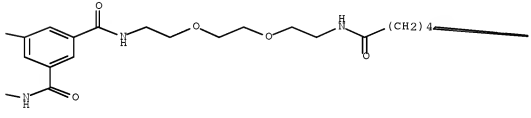

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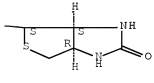
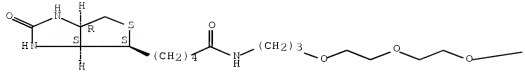


RN 194920-69-9 CAPLUS
CN 3,10,13,16-Tetraoxa-6,20-diazapentacosanoic acid, 25-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-5,21-dioxo-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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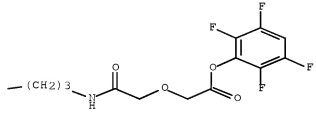
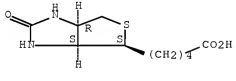


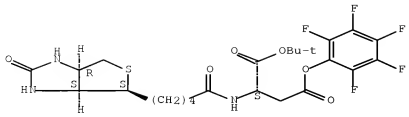
IT 58-85-5, Biotin 915944-89-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
RN 58-85-5 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 915944-89-7 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 1-(1,1-dimethylethyl) 4-(2,3,4,5,6-pentafluorophenyl) ester (CA INDEX NAME)

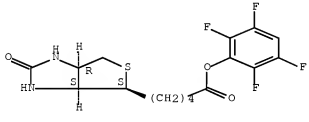
Absolute stereochemistry.



IT 173341-32-7P 175885-18-4P 183896-00-6P
183896-02-8P 194920-44-0P 194920-57-5P
194920-63-3P 217817-04-4P 217817-06-6DP,
dendrimers with iodolabeledbenzoyl, polylysine, polyglutamic and
polyaspartic acids 217817-06-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(synthesis of water-soluble multi-biotin-containing compds. for use
in targeting biotin-binding proteins)

RN 173341-32-7 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-,
2,3,5,6-tetrafluorophenyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

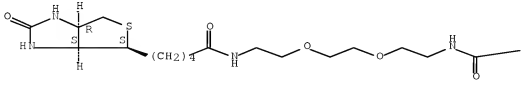
Absolute stereochemistry.



RN 175885-18-4 CAPLUS
CN 5,8-Dioxa-2,11-diazahexadecanoic acid,
16-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-12-oxo-,
1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

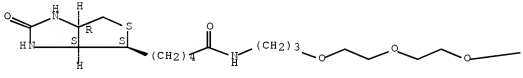


PAGE 1-B

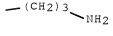
RN 183896-00-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[3-[2-[2-(3-aminopropoxy)ethoxy]ethoxy]propyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



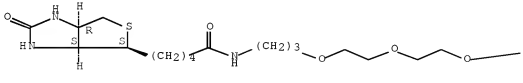
PAGE 1-B



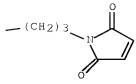
RN 183896-02-8 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[3-[2-[2-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propoxy]ethoxy]ethoxy]propyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



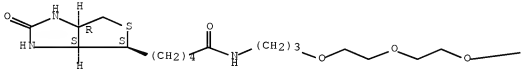
PAGE 1-B



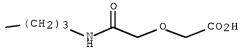
RN 194920-44-0 CAPLUS
CN 3,10,13,16-Tetraoxa-6,20-diazapentacosanoic acid,
25-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-5,21-dioxo-
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

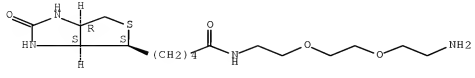


RN 194920-57-5 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,
N-[2-[2-(2-aminoethoxy)ethoxy]ethyl]hexahydro-2-oxo-,
2,2,2-trifluoroacetate (1:1), (3aS,4S,6aR)- (CA INDEX NAME)

CM 1

CRN 138529-46-1
CMF C16 H30 N4 O4 S

Absolute stereochemistry. Rotation (+).



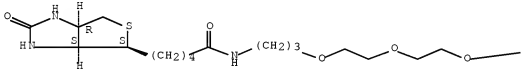
CM 2

CRN 76-05-1
CMF C2 H F3 O2

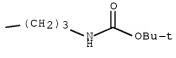
RN 194920-63-3 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaheneicosanoic acid,
21-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-oxo-,
1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



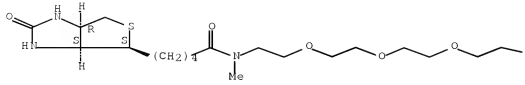
PAGE 1-B



RN 217817-04-4 CAPLUS
CN 4,7,10-Trioxa-13-azaoctadecanoic acid,
18-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-13-methyl-
14-oxo-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

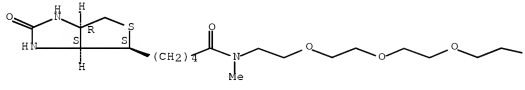


PAGE 1-B

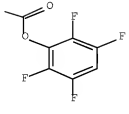
RN 217817-06-6 CAPLUS
CN 4,7,10-Trioxa-13-azaoctadecanoic acid,
18-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-13-methyl-14-oxo-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



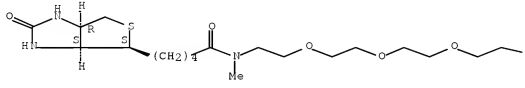
PAGE 1-B



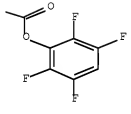
RN 217817-06-6 CAPLUS
CN 4,7,10-Trioxa-13-azaoctadecanoic acid, 18-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-13-methyl-14-oxo-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



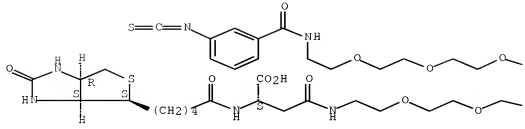
PAGE 1-B



IT 915944-85-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of water-soluble multi-biotin-containing compds. for use in targeting biotin-binding proteins)
RN 915944-85-3 CAPLUS
CN 8,11,25,28-Tetraoxa-5,14,22,31-tetraazapentatriacontanedioic acid, 18-[(16S)-16-carboxy-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-3,14,18-trioxo-7,10-dioxa-4,13,17-triazadocos-1-yl]-2,34-bis[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-18-[[14-(3-isothiocyanatophenyl)-1,14-dioxo-4,7,10-trioxa-13-azatetradec-1-yl]amino]-4,15,21,32-tetraoxo-, (2S,34S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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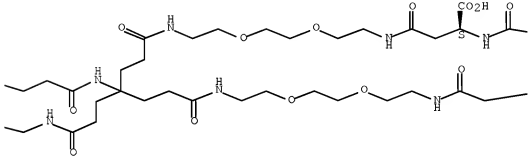
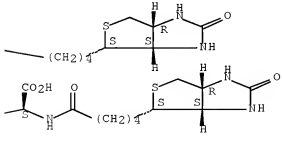


PAGE 1-C



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1229079 CAPLUS Full-text

DOCUMENT NUMBER: 146:742
TITLE: HMGB1 and caspase inhibitors in combination therapy compositions for treatment of diseases involving inflammatory cytokine cascade
INVENTOR(S): Tracey, Kevin J.; Yang, Huan
PATENT ASSIGNEE(S): The Feinstein Institute for Medical Research, USA
SOURCE: PCT Int. Appl., 158 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124477	A2	20061123	WO 2006-US18152	20060511
WO 2006124477	A3	20070510		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 1907003	A2	20080409	EP 2006-770191	20060511
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2005-680975P	P 20050513
			WO 2006-US18152	W 20060511

OTHER SOURCE(S): MARPAT 146:742

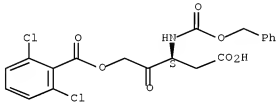
AB Compns. and methods are disclosed for treating a condition characterized by activation of an inflammatory cytokine cascade in a patient. The compns. comprise an agent that inhibits HMGB1 (high mobility group box chromosomal protein 1) biol. activity and a caspase inhibitor. The methods comprise treating a cell or a patient with sufficient amts. of the composition to inhibit the release of proinflammatory cytokine(s) and/or inhibit the inflammatory cytokine cascade.

IC ICM A61K
CC 1-7 (Pharmacology)
IT 50-36-2D, Cocaine, quaternary analogs of 51-83-2, Carbachol 51-84-3, Acetylcholine, biological studies 54-11-5, Nicotine 63-75-2, Arecoline 357-70-0, Galantamine 6270-63-9D, 2(1H)-Pyrazinone, derivs. 6363-82-2, Muscarine 14769-73-4, Levamisole 54135-60-3, 2,2'-Methylenebis(1,3-cyclohexanedione) 107233-08-9, Cevimeline 153088-73-4 156223-05-1, DMXB-A 156743-78-1 156743-79-2 156743-85-0 187389-52-2 192588-76-4, FLICE-inhibitory protein 220509-74-0 248270-40-8 248270-41-9 248270-43-1 248270-44-2 248270-45-3 294860-01-8, M 791 306771-08-4 325830-21-5, M 920 373358-00-0 915223-06-2 915223-07-3 915399-47-2, BD ApoBlock Caspase Inhibitor
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HMGB1 and caspase inhibitors in combination therapy compns. for treatment of diseases involving inflammatory cytokine cascade)
IT 153088-73-4 306771-08-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(HMGB1 and caspase inhibitors in combination therapy compns. for treatment of diseases involving inflammatory cytokine cascade)

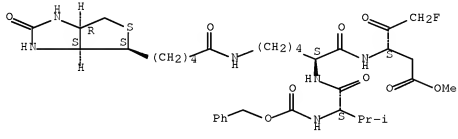
RN 153088-73-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-2-oxo-3-[[(phenylmethoxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 306771-08-4 CAPLUS
CN L-Lysinamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[(1S)-3-fluoro-1-(2-methoxy-2-oxoethyl)-2-oxopropyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:342052 CAPLUS Full-text
DOCUMENT NUMBER: 145:42184
TITLE: Extension of the Single Amino Acid Chelate Concept (SAAC) to Bifunctional Biotin Analogues for Complexation of the M(CO)3+1 Core (M = Tc and Re): Syntheses, Characterization, Biotinidase Stability, and Avidin Binding
AUTHOR(S): James, Shelly; Maresca, Kevin P.; Allis, Damian G.; Valliant, John F.; Eckelman, William; Babich, John W.; Zubieta, Jon
CORPORATE SOURCE: Department of Chemistry, Syracuse University, Syracuse, NY, 13244, USA
SOURCE: Bioconjugate Chemistry (2006), 17(3), 579-589 CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Biotin and avidin form one of the most stable complexes known (KD = 10-15 M-1) making this pairing attractive for a variety of biomedical applications including targeted radiotherapy. In this application, one of the pair is attached to a targeting mol., while the other is subsequently used to deliver a radionuclide for imaging and/or therapeutic applications. Recently, we reported a new single amino acid chelate (SAAC) capable of forming stable complexes with Tc(CO)3 or Re(CO)3 cores. We describe here the application of SAAC analogs for the development of a series of novel radiolabeled biotin derivs. capable of forming robust complexes with both Tc and Re. Compds. were prepared through varying modification of the free carboxylic acid group of biotin. Each 99mTc complex of SAAC-biotin was studied for their ability to bind avidin, susceptibility to biotinidase, and specificity for avidin in an in vivo avidin-containing tumor model. The radiochem. stability of the 99mTc(CO)3 complexes was also investigated by challenging each 99mTc-complex with large molar excesses of cysteine and histidine at elevated temperature All compds. were radiochem. stable for greater than 24 h at elevated temperature in the presence of histidine and cysteine. Both [99mTc(CO)3(L6)]+1 [TcL6; L6 = biotinylamidopropyl-N,N-(dipicolyl)amine] and [99mTc(CO)3(L12a)]+1 (TcL12; L12 = N,N-(dipicolyl)biotinamido-Boc-lysine; TcL12a; L12a = N,N-(dipicolyl)biotinamide-lysine) readily bound to avidin whereas [99mTc(CO)3(L9)]+1 [TcL9; L9 = N,N-(dipicolyl)biotinamine] demonstrated minimal specific binding. TcL6 and TcL9 were resistant to biotinidase cleavage, while TcL12a, which contains a lysine linkage, was rapidly cleaved. The highest uptake in an in vivo avidin tumor model was exhibited by TcL6, followed by TcL9 and TcL12a, resp. This is likely the result of both intact binding to avidin and resistance to circulating biotinidase. Ligand L6 is the first SAAC analog of biotin to demonstrate potential as a radiolabeled targeting vector of biotin capable of forming robust radiochem. complexes with both 99mTc and rhenium radionuclides. Computational simulations were performed to assess biotin-derivative accommodation within the binding site of the avidin. These calcns. predict that deformation of the surface domain of the binding pocket can occur to accommodate the transition metal-biotin derivs. with negligible changes to the inner-β-barrel, the region most responsible for binding and retaining biotin and its derivs. The biol. activity and biodistribution of the technetium complexes TcL6, TcL9, and TcL12a were examined in an avidin tumor model. In the avidin bead tumor localization model, TcL6 demonstrated the most favorable localization with a 7:1 ratio of avidin bead implanted muscle vs. normal muscle, while TcL9 exhibited a 2:1 ratio. However, TcL9 displayed no specificity for avidin.

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 29

IT 7440-15-5DP, Rhenium, biotin analog complexes 378784-45-3DP, biotin analog complexes, biological studies 889886-85-5DP, complexes with rhenium and technetium-99m 889886-86-6DP, complexes with rhenium and technetium-99m 889886-88-8DP, complexes with rhenium and technetium-99m
RL: PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)

IT 5460-29-7 6929-42-6 23288-60-0 25908-22-9 26445-06-7, Pyridinecarboxaldehyde 29227-68-7, Dipicolylamine 53906-36-8, Biotinol 62062-43-5 135242-89-6 142685-25-4 173341-32-7 828915-71-5 889886-87-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)

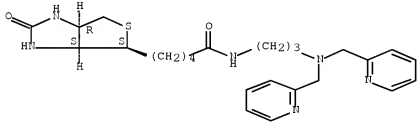
IT 163932-31-8P 199117-05-0P 199117-06-1P 889886-85-5P

889886-86-6P 889886-88-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)

IT 889886-85-5DP, complexes with rhenium and technetium-99m
889886-86-6DP, complexes with rhenium and technetium-99m
889886-88-8DP, complexes with rhenium and technetium-99m
RL: PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)

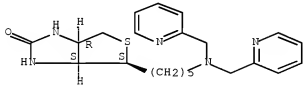
RN 889886-85-5 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[3-[bis(2-pyridinylmethyl)amino]propyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



RN 889886-86-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, 4-[5-[bis(2-pyridinylmethyl)amino]pentyl]tetrahydro-, (3aS,4S,6aR)- (CA INDEX NAME)

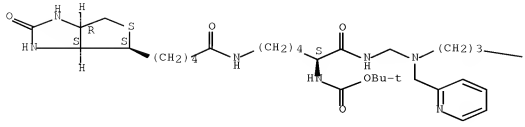
Absolute stereochemistry.



RN 889886-88-8 CAPLUS
CN Carbamic acid, [(1S)-5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-[[[[(2-pyridinylmethyl)[3-(2-pyridinyl)propyl]amino]methyl]amino]carbonyl]pentyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

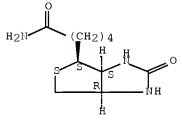
PAGE 1-A



PAGE 1-B

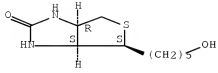
IT 6929-42-6 53906-36-8, Biotinol 62062-43-5
135242-89-6 173341-32-7 889886-87-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)
RN 6929-42-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-2-oxo-, (3aS,4S,6aR)-
(CA INDEX NAME)

Absolute stereochemistry.



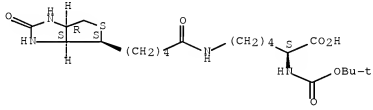
RN 53906-36-8 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, tetrahydro-4-(5-hydroxypentyl)-,
(3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



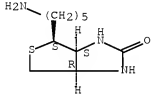
RN 62062-43-5 CAPLUS
CN L-Lysine, N2-[(1,1-dimethylethoxy)carbonyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



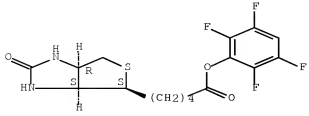
RN 135242-89-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, 4-(5-aminopentyl)tetrahydro-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



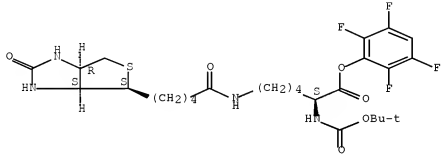
RN 173341-32-7 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2,3,5,6-tetrafluorophenyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



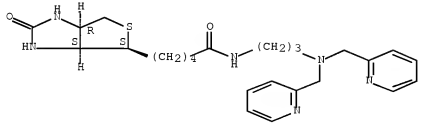
RN 889886-87-7 CAPLUS
CN L-Lysine, N2-[(1,1-dimethylethoxy)carbonyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



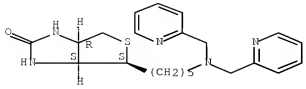
IT 889886-85-5P 889886-86-6P 889886-88-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(single amino acid chelate bifunctional biotin analogs complexation of Tc and Re core: preparation, stability, and avidin binding)
RN 889886-85-5 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[3-[bis(2-pyridinylmethyl)amino]propyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



RN 889886-86-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, 4-[5-[bis(2-pyridinylmethyl)amino]pentyl]tetrahydro-, (3aS,4S,6aR)- (CA INDEX NAME)

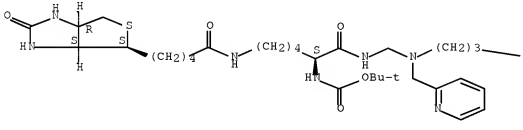
Absolute stereochemistry.



RN 889886-88-8 CAPLUS
CN Carbamic acid, [(1S)-5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-[[[[(2-pyridinylmethyl)[3-(2-pyridinyl)propyl]amino]methyl]amino]carbonyl]pentyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:333680 CAPLUS Full-text
DOCUMENT NUMBER: 140:357669
TITLE: Preparation of peptidyl activity-based probes for catalytically-active enzymes
INVENTOR(S): Winn, David; Campbell, David Alan
PATENT ASSIGNEE(S): Activx Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033397	A2	20040422	WO 2003-US32152	20031008 <--
WO 2004033397	A3	20060727		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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CA 2501831	A1	20040422	CA 2003-2501831	20031008 <--
AU 2003282575	A1	20040504	AU 2003-282575	20031008 <--
EP 1583726	A2	20051012	EP 2003-774762	20031008 <--
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JP 2006514824	T	20060518	JP 2004-543659	20031008 <--
US 20070141624	A1	20070621	US 2006-530646	20060111 <--
PRIORITY APPLN. INFO.:			US 2002-417664P P	20021009 <--
			WO 2003-US32152 W	20031008

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 140:357669

AB The invention provides compns. and methods for assessing profiles of catalytically-active enzymes (e.g., a hydrolase, most preferably a cysteine protease) in compns. containing a plurality of proteins. The methods use activity-based probes (ABPs) that have an affinity moiety for directing the binding of the ABP to one or more catalytically-active target enzymes, a reactive group for forming a covalent bond at an active site of the target enzyme(s), and a TAG (e.g., a detectable label, preferably a fluorophore). ABPs TAG-L-CO(NHCHR2CO)nNHCHR1-RG [R1, R2 are H, alkyl optionally containing 1-3 heteroatoms N, O, or S, alkylaryl, -heteroaryl, or -phenyl; RG is a reactive group that reacts to form a covalent bond with a catalytically-active target enzyme; L is optionally present and is an alkyl or heteroalkyl group of 1-20 backbone atoms selected from NR, O, S or CR2, where R is H or alkyl; n is 1-4] or pharmaceutically-acceptable salts or complexes are claimed. One or more ABPs may be combined with a protein-containing sample under conditions for binding and reaction of the ABP(s) with target enzyme(s) that are present in the sample. The resulting products may then be used to assess the active enzyme profile of the sample and can be correlated to the presence, amount, or activity of one or more target enzyme(s) present in the original complex protein mixture An example describes the synthesis of ANP TAMRA-NH(CH2)10CO-L-Asp-CH2OC6HF4-2,3,5,6, where TAMRA is a rhodamine dye.

IC ICM C07C
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 7, 9
ST peptide fluorescent prepn activity based probe enzyme protein
IT Diagnosis
Fluorescent indicators
(preparation of peptidyl activity-based probes for catalytically-active enzymes)
IT 681812-81-7P 681812-82-8P 681812-83-9P
681812-84-0P 681812-85-1P 681812-86-2P
681812-87-3P 681812-88-4P 681812-89-5P

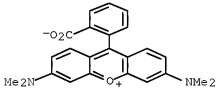
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)

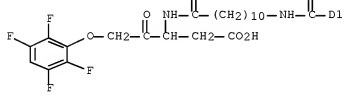
IT 769-39-1, 2 3 5 6 Tetrafluorophenol 5545-52-8 10436-25-6 118253-03-5 246256-50-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)

IT 153088-76-7P 254750-84-0P 254751-09-2P 254751-10-5P 681447-85-8P 681447-86-9P 681447-88-1P 681447-89-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)

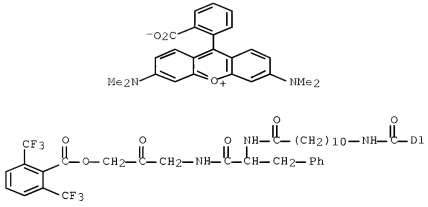
IT 681812-81-7P 681812-82-8P 681812-83-9P 681812-84-0P 681812-85-1P 681812-86-2P 681812-87-3P 681812-88-4P 681812-89-5P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)

RN 681812-81-7 CAPLUS
CN Xanthylium, 9-[2-carboxy-4(or 5)-[[[11-[[(1S)-1-(carboxymethyl)-2-oxo-3-(2,3,5,6-tetrafluorophenoxy)propyl]amino]-11-oxoundecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

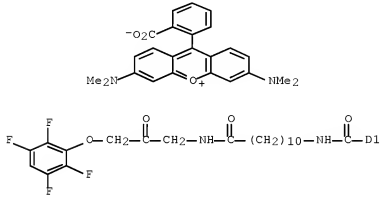




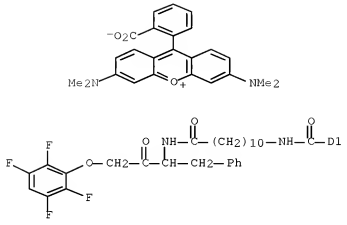
RN 681812-82-8 CAPLUS
CN Xanthylium, 9-[4(or 5)-[(15S)-22-[2,6-bis(trifluoromethyl)phenyl]-1,13,16,19,22-pentaoxo-15-(phenylmethyl)-21-oxa-2,14,17-triazadocos-1-yl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



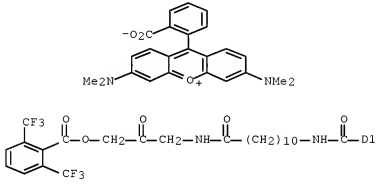
RN 681812-83-9 CAPLUS
CN Xanthylium, 9-[2-carboxy-4(or 5)-[[[11-oxo-11-[[2-oxo-3-(2,3,5,6-tetrafluorophenoxy)propyl]amino]undecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



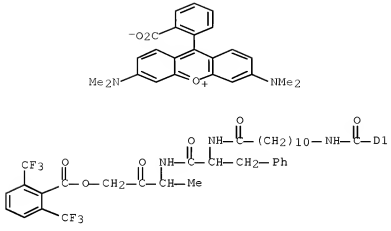
RN 681812-84-0 CAPLUS
CN Xanthylium, 9-[2-carboxy-4(or 5)-[[[11-oxo-11-[[(1S)-2-oxo-1-(phenylmethyl)-3-(2,3,5,6-tetrafluorophenoxy)propyl]amino]undecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



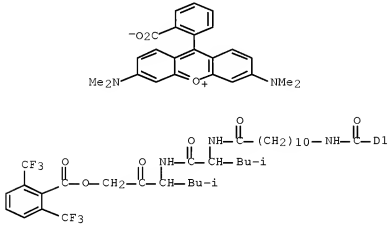
RN 681812-85-1 CAPLUS
CN Xanthylium, 9-[4(or 5)-[[[11-[[3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-2-oxopropyl]amino]-11-oxoundecyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



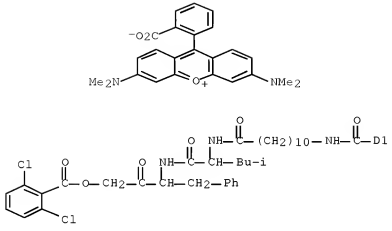
RN 681812-86-2 CAPLUS
CN Xanthylium, 9-[4(or 5)-[(15S,18S)-22-[2,6-bis(trifluoromethyl)phenyl]-18-methyl-1,13,16,19,22-pentaoxo-15-(phenylmethyl)-21-oxa-2,14,17-triazadocos-1-yl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



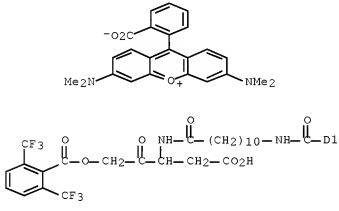
RN 681812-87-3 CAPLUS
CN Xanthylium, 9-[4(or 5)-[(15S,18S)-22-[2,6-bis(trifluoromethyl)phenyl]-15,18-bis(2-methylpropyl)-1,13,16,19,22-pentaoxo-21-oxa-2,14,17-triazadocos-1-yl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



RN 681812-88-4 CAPLUS
CN Xanthylium, 9-[2-carboxy-4(or 5)-[(15S,18S)-22-(2,6-dichlorophenyl)-15-(2-methylpropyl)-1,13,16,19,22-pentaoxo-18-(phenylmethyl)-21-oxa-2,14,17-triazadocos-1-yl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

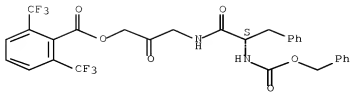


RN 681812-89-5 CAPLUS
CN Xanthylium, 9-[4(or 5)-[[[11-[[(1S)-3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-1-(carboxymethyl)-2-oxopropyl]amino]-11-oxoundecyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

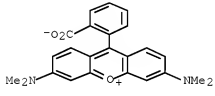


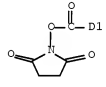
IT 118253-03-5 246256-50-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)
RN 118253-03-5 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, 2-oxo-3-[[(2S)-1-oxo-3-phenyl-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]propyl ester (CA INDEX NAME)

Absolute stereochemistry.



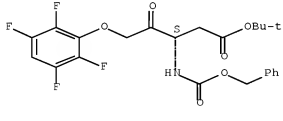
RN 246256-50-8 CAPLUS
CN Xanthylium, 9-[2-carboxy-4(or 5)-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)





IT 254751-09-2P 681447-86-9P 681447-88-1P
681447-89-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptidyl activity-based probes for catalytically-active enzymes)
RN 254751-09-2 CAPLUS
CN Pentanoic acid, 4-oxo-3-[[(phenylmethoxy)carbonyl]amino]-5-(2,3,5,6-tetrafluorophenoxy)-, 1,1-dimethylethyl ester, (3S)- (CA INDEX NAME)

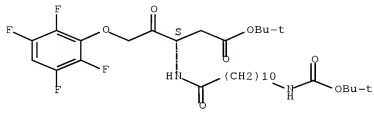
Absolute stereochemistry.



RN 681447-86-9 CAPLUS
CN Pentanoic acid, 3-[[11-[[(1,1-dimethylethoxy)carbonyl]amino]-1-

oxoundecyl]amino]-4-oxo-5-(2,3,5,6-tetrafluorophenoxy)-, 1,1-dimethylethyl ester, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

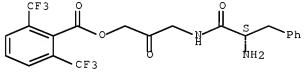


RN 681447-88-1 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, 3-[[(2S)-2-amino-1-oxo-3-phenylpropyl]amino]-2-oxopropyl ester, 4-methylbenzenesulfonate (1:1) (CA INDEX NAME)

CM 1

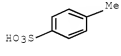
CRN 681447-87-0
CMF C21 H18 F6 N2 O4

Absolute stereochemistry.



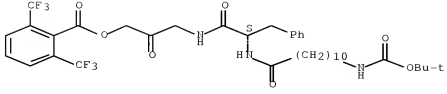
CM 2

CRN 104-15-4
CMF C7 H8 O3 S



RN 681447-89-2 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, (6S)-22,22-dimethyl-2,5,8,20-tetraoxo-6-(phenylmethyl)-21-oxa-4,7,19-triazatricos-1-yl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:132953 CAPLUS Full-text
DOCUMENT NUMBER: 138:183522
TITLE: Simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent
INVENTOR(S): Carpenter, Alan, Jr.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, USA
SOURCE: PCT Int. Appl., 340 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003013346	A2	20030220	WO 2002-US25375	20020807 <--
WO 2003013346	A3	20030814		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2002331042	A1	20030224	AU 2002-331042	20020807 <--
AU 2002331042	B2	20071025		
US 20030103898	A1	20030605	US 2002-213713	20020807 <--
US 7138104	B2	20061121		
EP 1423152	A2	20040602	EP 2002-768482	20020807 <--
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CN 1541115	A	20041027	CN 2002-815635	20020807 <--
CN 1298390	C	20070207		
JP 2004537573	T	20041216	JP 2003-518365	20020807 <--
HU 2004001904	A2	20041228	HU 2004-1904	20020807 <--
HU 2004001904	A3	20090128		
MX 2004001113	A	20040708	MX 2004-1113	20040204 <--
NO 2004000555	A	20040323	NO 2004-555	20040206 <--
IN 2004DN00287	A	20050401	IN 2004-DN287	20040209 <--

PRIORITY APPLN. INFO.: US 2001-310859P P 20010808 <--
WO 2002-US25375 W 20020807 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 138:183522
AB The present invention describes a method of concurrent imaging in a mammal comprising: (a) administering to said mammal a vitronectin receptor targeted imaging agent and a perfusion imaging agent; and (b) concurrently detecting the vitronectin receptor targeted imaging agent bound at the vitronectin receptor and the perfusion imaging agent; and (c) forming an image from the detection of said vitronectin targeted imaging agent and said perfusion imaging agent.
IC ICM A61B
CC 9-15 (Biochemical Methods)
Section cross-reference(s): 2, 8, 13
IT Angiogenesis
Chelating agents
Diagnostic agents
Drug screening
Heart
Imaging
Imaging agents
Mammalia
Perfusion
Reducing agents
Sound and Ultrasound
Surfactants
Test kits
X-ray
(simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT 40324-66-1P 57932-18-0P 137076-54-1P 192635-89-5P 220156-99-0P
250612-31-8P 277315-66-9P 277315-70-5P 277315-71-6P
277315-82-9P 277315-83-0P 277315-84-1P 277315-85-2P
277315-86-3P 277315-88-5P 277315-89-6P 277315-90-9P 277315-91-0P
277315-92-1P 277315-93-2P 277315-94-3P 277315-95-4P 277315-96-5P
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277316-02-6P 277316-04-8P 277316-06-0P 277316-08-2P 277316-09-3P
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277316-17-3P 277316-18-4P 277316-19-5P 277316-20-8P 277316-24-2P
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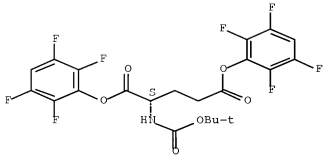
277316-32-2P 277316-33-3P 277316-34-4P 277316-36-6P 277316-37-7P
277316-38-8P 277316-40-2P 277316-41-3P 277316-44-6P 277316-45-7P
277316-47-9P 277316-48-0P 277316-50-4P 277316-52-6P 277316-53-7P
277316-56-0P 498575-82-9P 498575-83-0P 498575-84-1P 498575-85-2P
498575-86-3P 498575-88-5P 498575-89-6P 498575-91-0P 498575-92-1P
498575-95-4P 498575-97-6P 498575-98-7P 498575-99-8P 498576-00-4P
498576-04-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT 277315-82-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 277315-82-9 CAPLUS
CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-, 1,5-bis(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:794210 CAPLUS Full-text
DOCUMENT NUMBER: 137:275361
TITLE: Extended tethering approach for rapid identification of ligands
INVENTOR(S): Erlanson, Daniel A.; Braisted, Andrew C.; McDowell, Robert; Prescott, John
PATENT ASSIGNEE(S): Sunesis Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U. S. Provisional Ser. No. 310,725.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020150947	A1	20021017	US 2001-990421	20011121 <--
US 6919178	B2	20050719		
EP 1441228	A1	20040728	EP 2004-8373	20011120 <--
EP 1441228	B1	20060628		
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US 20020155505	A1	20021024	US 2002-121216	20020410 <--
US 6998233	B2	20060214		
CA 2464094	A1	20030605	CA 2002-2464094	20020424 <--
WO 2003046200	A2	20030605	WO 2002-US13061	20020424 <--
WO 2003046200	A3	20030724		
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AU 2002254725 A1 20030610 AU 2002-254725 20020424 <--
EP 1446496 A2 20040818 EP 2002-723967 20020424 <--
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JP 4391237 B2 20091224
NZ 532579 A 20061130 NZ 2002-532579 20020424 <--
RU 2295518 C2 20070320 RU 2004-119036 20020424 <--
EP 1939625 A2 20080702 EP 2008-6555 20020424 <--
EP 1939625 A3 20080903
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US 20030013125 A1 20030116 US 2002-143455 20020510 <--
US 20050287596 A9 20051229
CA 2457814 A1 20030220 CA 2002-2457814 20020510 <--
WO 2003014072 A1 20030220 WO 2002-US14778 20020510 <--
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AU 2002316090 A1 20030224 AU 2002-316090 20020510 <--
EP 1421063 A1 20040526 EP 2002-746365 20020510 <--
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JP 2004537594 T 20041216 JP 2003-519022 20020510 <--
NZ 530811 A 20050729 NZ 2002-530811 20020510 <--
CA 2454246 A1 20030220 CA 2002-2454246 20020805 <--
WO 2003014308 A2 20030220 WO 2002-US24921 20020805 <--
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AU 2002326537 A1 20030224 AU 2002-326537 20020805 <--
US 20030194745 A1 20031016 US 2002-214419 20020805 <--
EP 1421379 A2 20040526 EP 2002-761258 20020805 <--
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JP 2005503380 T 20050203 JP 2003-519438 20020805 <--
NZ 530721 A 20060929 NZ 2002-530721 20020805 <--
US 20040005632 A1 20040108 US 2003-374499 20030225 <--
US 7214487 B2 20070508
ZA 2004000342 A 20050117 ZA 2004-342 20040116 <--
ZA 2004000745 A 20041022 ZA 2004-745 20040129 <--
MX 2004001000 A 20040625 MX 2004-1000 20040130 <--
MX 2004001074 A 20040708 MX 2004-1074 20040203 <--
MX 2004004814 A 20040811 MX 2004-4814 20040520 <--

US 20050142614	A1	20050630	US 2005-54754		20050209	<--
US 20050186630	A1	20050825	US 2005-107658		20050415	<--
AU 2005203048	A1	20050804	AU 2005-203048		20050713	<--
AU 2005203048	B2	20070517				
JP 2006113077	A	20060427	JP 2005-359639		20051213	<--
ZA 2004003668	A	20060531	ZA 2004-3668		20060322	<--
US 20080261831	A1	20081023	US 2006-607257		20061201	<--
US 20080220536	A1	20080911	US 2007-735944		20070416	<--
JP 2009109515	A	20090521	JP 2009-20721		20090130	<--
AU 2009202965	A1	20090813	AU 2009-202965		20090722	<--
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			US 2001-310725P	P	20010807	<--
			US 1998-105372	A3	19980626	<--
			US 2001-981547	A2	20011017	<--
			AU 2002-25731	A3	20011120	<--
			EP 2001-995216	A3	20011120	<--
			JP 2002-544662	A3	20011120	<--
			US 2001-990421	A2	20011121	<--
			US 2002-121216	A	20020410	<--
			AU 2002-254725	A3	20020424	<--
			EP 2002-723967	A3	20020424	<--
			JP 2003-547631	A3	20020424	<--
			WO 2002-US13061	W	20020424	<--
			US 2002-377034P	P	20020501	<--
			WO 2002-US14778	W	20020510	<--
			US 2002-214419	B1	20020805	<--
			WO 2002-US24921	W	20020805	<--
			US 2003-374499	A1	20030225	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention concerns a method for rapid identification and characterization of binding partners for a target mol., and for providing binding partners with improved binding affinity. More specifically, the invention concerns an improved tethering method for the rapid identification of at least two binding partners that bind near one another to a target mol. This approach is based on the design of a Small Mol. Extender (SME) that is tethered, via a reversible or irreversible covalent bond, to a Target Mol. (TM) at or near a first site of interest, and has a chemical reactive group reactive with small organic mols. to be screened for affinity to a second site of interest on the TM. Accordingly, the SME is used for screening a plurality of ligand candidates to identify a ligand that has intrinsic binding affinity for a second site of interest on the TM. If desired, further SME's can be designed based on the identification of the ligand with binding affinity for the second site of interest, and the screening can be repeated to identify further ligands having intrinsic binding affinity for the same or other site(s) of interest on the same or related TM's.

IC ICM C12Q001-68
ICS G01N033-53; G01N033-543

INCL 435007100

CC 9-14 (Biochemical Methods)
Section cross-reference(s): 1

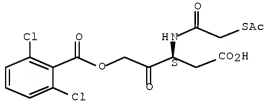
IT Enzymes, analysis
RL: ANT (Analyte); ANST (Analytical study)
(DNA helicase; extended tethering approach for rapid identification of ligands)

IT Proteins
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(associated with DNA/RNA synthesis or degradation; extended tethering approach for rapid identification of ligands)

IT 60-23-1, Cysteamine 60-24-2, Mercaptoethanol 70-18-8, Glutathione, uses 1892-31-5, Propanethioic acid 3483-12-3,

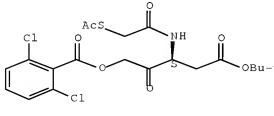
Dithiothreitol 4023-53-4 5961-85-3 6892-68-8, Dithioerythritol
RL: NUU (Other use, unclassified); USES (Uses)
(extended tethering approach for rapid identification of ligands)
IT 428819-41-4P, Benzoic acid, 2,6-dichloro-,
(3S)-3-[[(acetylthio)acetyl]amino]-4-carboxy-2-oxobutyl ester
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(extended tethering approach for rapid identification of ligands)
IT 428819-38-9P, L-Aspartic acid, N-[(acetylthio)acetyl]-,
4-(1,1-dimethylethyl) ester 428819-39-0P, Pentanoic acid,
3-[[(acetylthio)acetyl]amino]-5-chloro-4-oxo-, 1,1-dimethylethyl ester,
(3S)- 428819-40-3P, Benzoic acid, 2,6-dichloro-,
(3S)-3-[[(acetylthio)acetyl]amino]-5-(1,1-dimethylethoxy)-2,5-dioxopentyl
ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(extended tethering approach for rapid identification of ligands)
IT 428819-41-4P, Benzoic acid, 2,6-dichloro-,
(3S)-3-[[(acetylthio)acetyl]amino]-4-carboxy-2-oxobutyl ester
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(extended tethering approach for rapid identification of ligands)
RN 428819-41-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-3-[[2-(acetylthio)acetyl]amino]-4-
carboxy-2-oxobutyl ester (CA INDEX NAME)

Absolute stereochemistry.



IT 428819-40-3P, Benzoic acid, 2,6-dichloro-,
(3S)-3-[[(acetylthio)acetyl]amino]-5-(1,1-dimethylethoxy)-2,5-dioxopentyl
ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(extended tethering approach for rapid identification of ligands)
RN 428819-40-3 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-3-[[2-(acetylthio)acetyl]amino]-5-(1,1-
dimethylethoxy)-2,5-dioxopentyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 148 THERE ARE 148 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:424944 CAPLUS Full-text
DOCUMENT NUMBER: 138:66404
TITLE: Amelioration of myocardial global ischemia/reperfusion injury with volume-regulatory chloride channel inhibitors in vivo
AUTHOR(S): Mizoguchi, Kazuhiro; Maeta, Hajime; Yamamoto, Akira; Oe, Masahiro; Kosaka, Hiroaki
CORPORATE SOURCE: First Department of Surgery and Second Department of Physiology, Kagawa Medical University, Kagawa, 761-0793, Japan
SOURCE: Transplantation (2002), 73(8), 1185-1193
CODEN: TRPLAU; ISSN: 0041-1337
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recently, the apoptotic volume decrease was suggested to be regulated by volume regulatory Cl- channels in cultured cell lines. We thus examined whether inhibition of volume-regulatory Cl- channels is cardioprotective, like caspase inhibition, by hindering the apoptosis of cardiomyocytes induced by global ischemia/reperfusion (I/R) in vivo. We performed global ischemia for 8 min at 37℃ or 4℃ in isolated rat hearts, followed by 24-h reperfusion via heterotopic heart transplantation. The heart tissue was examined by means of the terminal deoxynucleotidyl transferase-mediated dUTP nick end-labeling (TUNEL) method, genomic DNA electrophoresis, and caspase-3 activity. Two blockers of volume-regulatory Cl- channels, 4,4'-diisothiocyanostilbene-2,2'-disulfonic acid (DIDS) and 5-nitro-2-(3-phenylpropylamino)-benzoate (NPPB), and a broad-spectrum caspase inhibitor, benzoyloxycarbonyl-Asp-CH2OC(O)-2,6-dichlorobenzene (Z-Asp-DCB), were administered i.v. Triphenyltetrazolium chloride (TTC) staining and ultrasound cardiog. were performed to examine myocardial viability. The TTC-unstained region was assessed by means of horseradish peroxidase (HRP) infiltration and the TUNEL method. The transplanted hearts showed TUNEL-positivity and DNA laddering with a peak at 24 h during reperfusion after ischemia at 37℃, but not at 4℃. NPPB and DIDS were as potent as Z-Asp-DCB for recovery of cardiac function and for blocking the appearance of TUNEL-positivity, DNA laddering, caspase 3 activity, and a TTC-unstained area. TTC-unstained areas were composed of either TUNEL- and slightly HRP-pos. or TUNEL-neg. and strongly HRP-pos. cardiomyocytes. The present results demonstrated that myocardial DNA fragmentation, caspase activation, and loss of cardiac function after global I/R were blocked by NPPB and DIDS, similar to in the case of Z-Asp-DCB. These results suggest that inhibition of volume-regulatory Cl- channels is also effective for preventing cardiac I/R injury.

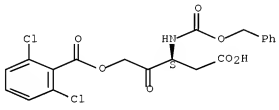
CC 1-8 (Pharmacology)
IT 153088-73-4
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(apoptosis inhibitor, comparison; amelioration of myocardial global ischemia/reperfusion injury with volume-regulatory chloride channel inhibitors in vivo)
IT 153088-73-4
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(apoptosis inhibitor, comparison; amelioration of myocardial global ischemia/reperfusion injury with volume-regulatory chloride channel inhibitors in vivo)

RN 153088-73-4 CAPLUS

CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-2-oxo-3-[[(phenylmethoxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:408909 CAPLUS Full-text

DOCUMENT NUMBER: 136:398188

TITLE: An extended tethering approach for rapid identification of ligands

INVENTOR(S): Erlanson, Daniel A.; Braisted, Andrew; McDowell, Robert; Prescott, John

PATENT ASSIGNEE(S): Sunesis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002042773	A2	20020530	WO 2001-US44036	20011120 <--
WO 2002042773	A3	20021114		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2430234	A1	20020530	CA 2001-2430234	20011120 <--
CA 2430234	C	20080212		
AU 2002025731	A	20020603	AU 2002-25731	20011120 <--
EP 1337853	A2	20030827	EP 2001-995216	20011120 <--
EP 1337853	B1	20090107		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004514891	T	20040520	JP 2002-544662	20011120	<--
JP 3836791	B2	20061025			
EP 1441228	A1	20040728	EP 2004-8373	20011120	<--
EP 1441228	B1	20060628			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR

NZ 525861	A	20040924	NZ 2001-525861	20011120	<--
AU 2002225731	B2	20050414	AU 2002-225731	20011120	<--
AT 420366	T	20090115	AT 2001-995216	20011120	<--
IL 155926	A	20090615	IL 2001-155926	20011120	<--
ES 2322796	T3	20090629	ES 2001-995216	20011120	<--
ZA 2003003772	A	20040517	ZA 2003-3772	20030515	<--
MX 2003004435	A	20050125	MX 2003-4435	20030520	<--
HK 1063844	A1	20061229	HK 2004-106701	20040906	<--
AU 2005203048	A1	20050804	AU 2005-203048	20050713	<--
AU 2005203048	B2	20070517			
JP 2006113077	A	20060427	JP 2005-359639	20051213	<--

PRIORITY APPLN. INFO.:	US 2000-252294P	P	20001121 <--
	AU 2002-25731	A3	20011120 <--
	EP 2001-995216	A3	20011120 <--
	JP 2002-544662	A3	20011120 <--
	WO 2001-US44036	W	20011120 <--

AB The invention concerns a method for rapid identification and characterization of binding partners for a target mol., and for providing binding partners with improved binding affinity. More specifically, the invention concerns an improved tethering method for the rapid identification of at least two binding partners that bind near one another to a target mol. This approach is based on the design of a Small Mol. Extender (SME) that is tethered, via a reversible or irreversible covalent bond, to a Target Mol. (TM) at or near a first site of interest, and has a chemical reactive group reactive with small organic mols. to be screened for affinity to a second site of interest on the TM. Accordingly, the SME is used for screening a plurality of ligand candidates to identify a ligand that has intrinsic binding affinity for a second site of interest on the TM. If desired, further SME's can be designed based on the identification of the ligand with binding affinity for the second site of interest, and the screening can be repeated to identify further ligands having intrinsic binding affinity for the same or other site(s) of interest on the same or related TM's.

IC ICM G01N033-53

CC 9-14 (Biochemical Methods)
Section cross-reference(s): 1

IT Enzymes, analysis
RL: ANT (Analyte); ANST (Analytical study)
(DNA helicase; extended tethering approach for rapid identification of ligands)

IT Proteins
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(associated with DNA/RNA synthesis or degradation; extended tethering approach for rapid identification of ligands)

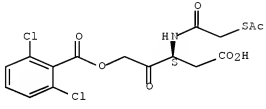
IT 60-23-1, Cysteamine 60-24-2, Mercaptoethanol 70-18-8, Glutathione, uses 1892-31-5, Propanethioic acid 3483-12-3, Dithiothreitol 4023-53-4 5961-85-3 6892-68-8, Dithioerythritol
RL: NUU (Other use, unclassified); USES (Uses)
(extended tethering approach for rapid identification of ligands)

IT 428819-41-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(extended tethering approach for rapid identification of ligands)

IT 428819-38-9P 428819-39-0P 428819-40-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

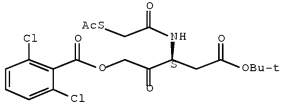
(Reactant or reagent)
(extended tethering approach for rapid identification of ligands)
IT 428819-41-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(extended tethering approach for rapid identification of ligands)
RN 428819-41-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-3-[[2-(acetylthio)acetyl]amino]-4-carboxy-2-oxobutyl ester (CA INDEX NAME)

Absolute stereochemistry.



IT 428819-40-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(extended tethering approach for rapid identification of ligands)
RN 428819-40-3 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-3-[[2-(acetylthio)acetyl]amino]-5-(1,1-dimethylethoxy)-2,5-dioxopentyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:185062 CAPLUS Full-text
DOCUMENT NUMBER: 136:232548
TITLE: Preparation of γ-keto acid dipeptides as inhibitors of caspase-3
INVENTOR(S): Han, Yongxin; Giroux, Andre; Grimm, Erich L.; Aspiotis, Renee; Black, Cameron
PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020465	A2	20020314	WO 2001-CA1272	20010906 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2421172	A1	20020314	CA 2001-2421172	20010906 <--
AU 2001093533	A	20020322	AU 2001-93533	20010906 <--
EP 1317414	A2	20030611	EP 2001-973867	20010906 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004521080	T	20040715	JP 2002-525088	20010906 <--
US 20020165230	A1	20021107	US 2001-948244	20010907 <--
US 6525025	B2	20030225		

PRIORITY APPLN. INFO.: US 2000-231019P P 20000908 <--
WO 2001-CA1272 W 20010906 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:232548

AB γ-Keto acid dipeptides RCR12CONHCR2R3CONHCH(CH2CO2H)COCH2-O-W-Z [W = a bond, CH2, CO or COCH2; Z = H, (un)substituted alkyl, cycloalkyl or a benzofused analog, Ph, naphthyl or a 5- to 10-membered mono- or bicyclic, aromatic or non-aromatic ring, or a benzofused analog, containing 1-3 heteroatoms selected from O, S and N; R = (un)substituted alkoxyphenyl; R1 = H, halo, OH, alkyl or alkoxy optionally substituted by oxo or 1-3 halo groups; R2 = H, Ph, naphthyl, (un)substituted (cyclo)alkyl; R3 = H or R2R3 represent a 4-7 membered ring optionally containing one heteroatom selected from O, S and N] were prepared as inhibitors of caspase-3. Thus, (3S)-5-[[(2-chloro-6-fluorobenzyl)oxy]-3-[[(2S)-2-[[2-(2,5- dimethoxyphenyl)acetyl]amino]-3-methylbutanoyl]amino]-4-oxopentanoic acid was prepared by the solid phase method by loading (S)-FmocNHCH(CH2CO2Bu-t)COCH2Br (Fmoc = fluorenylmethoxycarbonyl) (preparation described) onto a solid support using the technol. described by Webb et al. (1992).

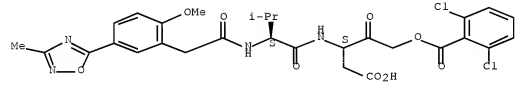
IC ICM C07C237-22
ICS A61K031-16; A61P031-18; C07D413-12; C07D241-44; C07D239-34; C07D307-86

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 7

IT 403499-16-1P 403499-17-2P 403499-18-3P 403499-19-4P 403499-20-7P
403499-21-8P 403499-22-9P 403499-23-0P 403499-24-1P
403499-25-2P 403499-26-3P 403499-27-4P 403499-28-5P 403499-29-6P
403499-30-9P 403499-31-0P 403499-32-1P 403499-33-2P
403499-34-3P 403499-35-4P 403499-36-5P 403499-37-6P
403499-38-7P 403499-39-8P 403499-40-1P 403499-41-2P 403499-42-3P
403499-43-4P 403499-44-5P 403499-45-6P 403499-46-7P 403499-47-8P
403499-48-9P 403499-49-0P 403499-50-3P 403499-51-4P 403499-52-5P
403499-53-6P 403499-54-7P 403499-55-8P 403499-56-9P 403499-57-0P
403499-58-1P 403499-59-2P 403499-60-5P 403499-61-6P 403499-62-7P
403499-63-8P 403499-64-9P 403499-65-0P 403499-66-1P 403499-67-2P
403499-68-3P 403499-69-4P 403499-70-7P 403499-71-8P 403499-72-9P
403499-73-0P 403499-74-1P 403499-75-2P 403499-76-3P 403499-77-4P

403499-78-5P 403499-79-6P 403499-80-9P 403499-81-0P 403499-82-1P
403499-83-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
IT 93-25-4, 2-Methoxyphenylacetic acid 367-12-4, 2-Fluorophenol
1758-25-4, 2,5-Dimethoxyphenylacetic acid 2673-19-0 5292-43-3,
tert-Butyl bromoacetate 6956-76-9 13518-40-6 22059-22-9,
Methylamidoxime 68858-20-8 71989-14-5 115416-38-1, 5-
Biotinamidopentylamine 403499-84-3 403499-85-4 403499-92-3
403499-93-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
IT 116296-30-1P 294860-44-9P 294860-95-0P 294860-96-1P 403499-86-5P
403499-87-6P 403499-88-7P 403499-89-8P 403499-90-1P 403499-91-2P
403499-94-5P 403499-95-6P 403499-96-7P
403499-97-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
IT 403499-21-8P 403499-31-0P 403499-35-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
RN 403499-21-8 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-3-[[(2S)-2-[[2-[2-methoxy-5-(3-
methyl-1,2,4-oxadiazol-5-yl)phenyl]acetyl]amino]-3-methyl-1-
oxobutyl]amino]-2-oxobutyl ester (CA INDEX NAME)

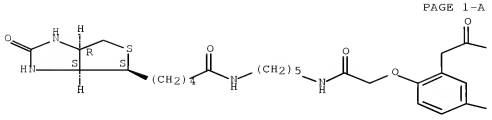
Absolute stereochemistry.



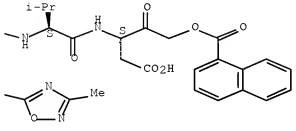
RN 403499-31-0 CAPLUS
CN 1-Naphthalenecarboxylic acid, (3S)-4-carboxy-3-[[(2S)-2-[[2-[2-[2-[[5-[[5-
[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-
oxopentyl]amino]pentyl]amino]-2-oxoethoxy]-5-(3-methyl-1,2,4-oxadiazol-5-
yl)phenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-2-oxobutyl ester (CA
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

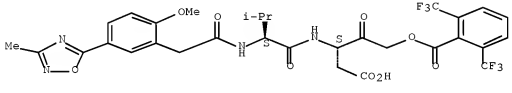


PAGE 1-B



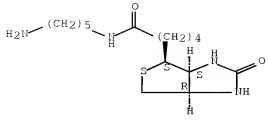
RN 403499-35-4 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, (3S)-4-carboxy-3-[[(2S)-2-[[2-[2-methoxy-5-(3-methyl-1,2,4-oxadiazol-5-yl)phenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-2-oxobutyl ester (CA INDEX NAME)

Absolute stereochemistry.



IT 115416-38-1, 5-Biotinamidopentylamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
RN 115416-38-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-(5-aminopentyl)hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

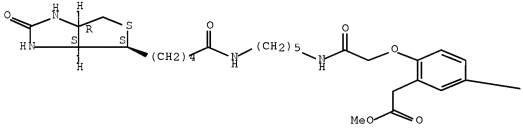
Absolute stereochemistry.



IT 403499-96-7P 403499-97-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of γ-keto acid dipeptides as inhibitors of caspase-3)
RN 403499-96-7 CAPLUS
CN Benzeneacetic acid, 2-[2-[[5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]pentyl]amino]-2-oxoethoxy]-5-(3-methyl-1,2,4-oxadiazol-5-yl)-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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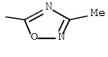
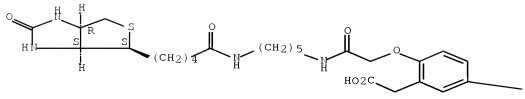


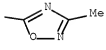
RN 403499-97-8 CAPLUS
CN Benzeneacetic acid, 2-[2-[[5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]pentyl]amino]-2-oxoethoxy]-5-(3-methyl-1,2,4-oxadiazol-5-yl)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:111162 CAPLUS Full-text
DOCUMENT NUMBER: 136:322140
TITLE: A critical role for ethylene in hydrogen peroxide release during programmed cell death in tomato suspension cells
AUTHOR(S): de Jong, Anke J.; Yakimova, Elena T.; Kapchina, Veneta M.; Woltering, Ernst J.
CORPORATE SOURCE: Wageningen University and Research Center, Agrotechnological Research Institute (ATO), Wageningen, 6708 PD, Neth.
SOURCE: Planta (2002), 214(4), 537-545
CODEN: PLANAB; ISSN: 0032-0935
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Camptothecin, a topoisomerase-I inhibitor used in cancer therapy, induces apoptosis in animal cells. In tomato (Lycopersicon esculentum Mill.) suspension cells, camptothecin induces cell death that is accompanied by the characteristic nuclear morphol. changes such as chromatin condensation and nuclear and DNA fragmentation that are commonly associated with apoptosis in animal systems. These effects of camptothecin can effectively be blocked by inhibitors of animal caspases, indicating that, in tomato suspension cells, camptothecin induces a form of programmed cell death (PCD) with similarities to animal apoptosis (A.J. De Jong et al.,2000) . Camptothecin-induced cell death was employed to study processes involved in plant PCD. Camptothecin induced a transient increase in H2O2 production starting within 2 h of application. Both camptothecin-induced cell death and the release of H2O2 were effectively blocked by application of the calcium-channel blocker lanthanum chloride, the caspase-specific inhibitor Z-Asp-CH2-DCB, or the NADPH

oxidase inhibitor di-Ph iodonium, indicating that camptothecin exerts its effect on cell death through a calcium- and caspase-dependent stimulation of NADPH oxidase activity. In addition, ethylene is an essential factor in camptothecin-induced PCD. Inhibition of either ethylene synthesis or ethylene perception by L-α-(2-aminoethoxyvinyl)glycine or silver thiosulfate, resp., blocked camptothecin-induced H2O2 production and PCD. Although, in itself, insufficient to trigger H2O2 production and cell death, exogenous ethylene greatly stimulated camptothecin-induced H2O2 production and cell death. Thus, ethylene is a potentiator of the camptothecin-induced oxidative burst and subsequent PCD in tomato cells. The possible mechanisms by which ethylene stimulates cell death are discussed.

CC 11-5 (Plant Biochemistry)

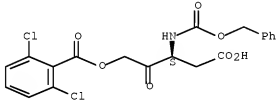
IT 10099-58-8, Lanthanum chloride 10182-84-0, Diphenyl iodonium 153088-73-4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ethylene in hydrogen peroxide release during programmed cell death in tomato suspension cells induced by camptothecin response to)

IT 153088-73-4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ethylene in hydrogen peroxide release during programmed cell death in tomato suspension cells induced by camptothecin response to)

RN 153088-73-4 CAPLUS

CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-2-oxo-3-[[(phenylmethoxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 55 THERE ARE 55 CAPLUS RECORDS THAT CITE THIS RECORD (55 CITINGS)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:51305 CAPLUS Full-text

DOCUMENT NUMBER: 136:123597

TITLE: Preparation of stable radiopharmaceutical compositions useful for tumor therapy

INVENTOR(S): Liu, Shuang; Barrett, John A.; Carpenter, Alan P., Jr.

PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 127 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

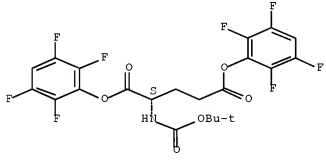
WO 2002004030 A2 20020117 WO 2001-US21261 20010705 <--
WO 2002004030 A3 20030227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2413538 A1 20020117 CA 2001-2413538 20010705 <--
US 20020122768 A1 20020905 US 2001-899629 20010705 <--
EP 1311301 A2 20030521 EP 2001-984147 20010705 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: US 2000-216396P P 20000706 <--
WO 2001-US21261 W 20010705 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:123597

AB The present invention provides stable radiopharmaceutical compns. including a therapeutic radionuclide and an effective stabilizing amount of an aromatic stabilizer (e.g., a polyhydroxylated aromatic compound, an aromatic amine, or a hydroxylated aromatic amine), alone or in combination with other antioxidants or stabilizers, to inhibit radiolytic degradation of radiopharmaceuticals. The present invention also provides improved radiopharmaceutical formulations by the use of an aromatic stabilizing agent (e.g., a polyhydroxylated aromatic compound, an aromatic amines, or a hydroxylated aromatic amine), and/or low temperature storage. The present invention also provides processes for making stable radiopharmaceutical compns. The present invention also provides the use of the pharmaceutical compns. in medical therapy and/or medical diagnosis.

IC ICM A61K051-04
ICS A61K051-08
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 8, 34, 78
ST radiopharmaceutical stabilization gentisate hydroxybenzoate; sulfonatobenzeneamine ascorbate radiopharmaceutical stabilization; antioxidant hydroxybenzaldehyde radiopharmaceutical stabilization; radionuclide chelator biomol conjugate prepn stabilization
IT Peptides, biological studies
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
IT 108-68-9 769-39-1 2419-94-5 2969-81-5 6066-82-6 18807-71-1 114559-25-0 137076-54-1 208580-27-2 277316-35-5 277316-57-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
IT 40324-66-1P 57932-18-0P 161552-03-0P 246234-73-1P 250612-43-2P 250612-45-4P 250612-48-7P 250612-82-9P 277315-71-6P 277315-82-9P 277315-89-6P 277315-90-9P 277316-24-2P 277316-27-5P 277316-28-6P 277316-29-7P 277316-30-0P 277316-31-1P 277316-40-2P 277316-41-3P 277316-44-6P 277316-45-7P 277316-58-2P 389885-48-7DP, oxime resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chelator-optional linker-biomol. conjugates for

use in stable radiopharmaceutical compns.)
IT 250612-07-8P 277315-68-1P 277315-72-7P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
IT 277315-82-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
RN 277315-82-9 CAPLUS
CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-, 1,5-bis(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:855316 CAPLUS Full-text
DOCUMENT NUMBER: 136:247856
TITLE: The solid phase synthesis and NMR spectroscopy of a 99Tc chelate-bombesin derived peptide conjugate
AUTHOR(S): Valliant, John F.; Riddoch, R. William; Hughes, Donald W.; Roe, David G.; Fauconnier, Theresa K.; Thornback, John R.
CORPORATE SOURCE: Department of Chemistry, McMaster University, Hamilton, ON, L8S 4M1, Can.
SOURCE: Inorganica Chimica Acta (2001), 325(1,2), 155-163
CODEN: ICHAA3; ISSN: 0020-1693
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:247856
AB A bombesin derived peptide-99Tc chelate conjugate was prepared using a solid phase synthetic methodol. The reported approach involved linking a prefabricated bifunctional N2N'S technetium chelate complex to a resin bound peptide sequence derived from bombesin, which has been shown to bind to the gastrin-releasing peptide (GRP) receptor. The technetium chelate-peptide conjugate was subsequently isolated from the solid support and characterized

by electrospray mass spectrometry, HPLC and NMR spectroscopy. The goal of the approach was to develop a versatile solid phase synthetic procedure that would facilitate the future application of modern drug discovery techniques for the development of receptor selective technetium radiopharmaceuticals. Furthermore, the NMR studies of the reported radiometal-peptide conjugate provide an important reference for the characterization of future bombesin-based radiopharmaceuticals.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 22, 78

ST solid phase synthesis technetium chelate bombesin derived peptide conjugate; technetium chelate complex linking peptide resin bound NMR; gastrin releasing peptide receptor binding bombesin based radiopharmaceutical

IT Solid phase synthesis
(peptide; solid phase synthesis and NMR spectroscopy of 99Tc chelate-bombesin derived peptide conjugate)

IT NMR (nuclear magnetic resonance)
Radiopharmaceuticals
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

IT Gastrin-releasing peptide receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

IT Chelates
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

IT Bombesin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type BB2; solid phase synthesis and NMR spectroscopy of 99Tc chelate-bombesin derived peptide conjugate)

IT 31362-50-2DP, Bombesin, 99Tc chelate derived peptide conjugate
215307-03-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

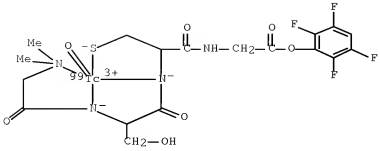
IT 92622-25-8 231614-43-0 344798-48-7D, resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

IT 259198-91-9P 259256-16-1P 404391-38-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

IT 404391-38-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid phase synthesis and NMR spectroscopy of 99Tc chelate -bombesin derived peptide conjugate)

RN 404391-38-4 CAPLUS

CN Technetium-99Tc, oxo[2,3,5,6-tetrafluorophenyl N,N-dimethylglycyl-κN-L-seryl-κN-L-cysteinyl-κN,κS-glycinato(3-)]-, (SP-5-25)- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:408721 CAPLUS Full-text
DOCUMENT NUMBER: 135:134197
TITLE: Biotin reagents for antibody pretargeting. 5. Additional studies of biotin conjugate design to provide biotinidase stability
AUTHOR(S): Wilbur, D. Scott; Hamlin, Donald K.; Chyan, Ming-Kuan; Kegley, Brian B.; Pathare, Pradip M.
CORPORATE SOURCE: Department of Radiation Oncology, University of Washington, Seattle, WA, 98195, USA
SOURCE: Bioconjugate Chemistry (2001), 12(4), 616-623
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An investigation was conducted in which the stabilities of four structurally different biotin derivs. were assessed with regard to biotinamide bond hydrolysis by the enzyme biotinidase. The biotin derivs. studied contained an extra methylene in the valeric acid chain of biotin (i.e., homobiotin), or contained conjugated amino acids having hydroxymethylene, carboxylate, or acetate functionalities on a methylene alpha to the biotinamide bond. The biotinidase hydrolysis assay was conducted on biotin derivs. that were radioiodinated at high specific activity, and then subjected to diluted human serum at 37° for 2 h. After incubation, assessment of biotinamide bond hydrolysis by biotinidase was readily achieved by measuring the percentage of radioactivity that did not bind with avidin. As controls, an unsubstituted biotin derivative which is rapidly cleaved by biotinidase and an N-methyl-substituted biotin derivative which is stable to biotinidase cleavage were included in the study. The results indicate that increasing the distance from the biotin ring structure to the biotinamide bond by one methylene only decreases the rate of biotinidase cleavage, but does not block it. The data obtained also indicate that placing a hydroxymethylene, carboxylate, or acetate alpha to the biotinamide bond is effective in blocking the biotinamide hydrolysis reaction. These data, in combination with data previously obtained, which indicate that biotin derivs. containing hydroxymethylene or carboxylate moieties retain the slow dissociation rate of biotin from avidin and streptavidin [Wilbur, D. S., et al. (2000) Bioconjugate Chemical 11, 569-583], strongly support incorporation of these structural features into biotin derivs. being used for in vivo targeting applications.

CC 9-14 (Biochemical Methods)

ST biotin reagent antibody pretargeting biotinidase stability
IT Hydrolysis
(biotin reagents for antibody pretargeting.)
IT 194920-45-1P 194920-46-2P 194920-60-0P
194920-61-1P 194920-64-4P 194920-71-3P
351534-98-0P 351534-99-1P 351535-00-7P
351535-01-8P 351535-02-9P 351535-03-0P
351535-04-1P 351535-05-2P 351535-06-3P
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(biotin reagents for antibody pretargeting.)
IT 9025-15-4, Biotinidase
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(biotin reagents for antibody pretargeting.)
IT 35013-72-0 188014-61-1 194920-62-2
295322-35-9 295322-41-7 295322-44-0
295322-51-9 351535-07-4 351535-08-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting.)
IT 295322-36-0P 295322-42-8P 295322-45-1P
295322-52-0P 295322-53-1P 351535-09-6P
351535-10-9P 351535-11-0P 351535-12-1P
351535-13-2P 351535-14-3P 351535-15-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting.)
IT 194920-45-1P 194920-46-2P 194920-60-0P
194920-61-1P 194920-64-4P 194920-71-3P
351534-98-0P 351534-99-1P 351535-00-7P
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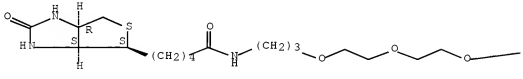
351535-04-1P 351535-05-2P 351535-06-3P
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(biotin reagents for antibody pretargeting.)
RN 194920-45-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[15-(4-iodophenyl)-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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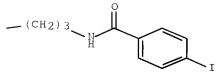
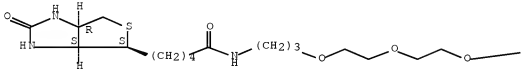


RN 194920-46-2 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[15-[4-(iodo-125I)phenyl]-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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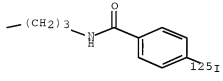
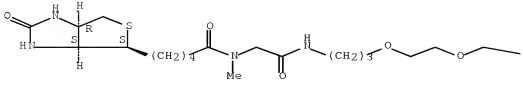


RN 194920-60-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[1-(4-iodophenyl)-1,17-dioxo-6,9,12-trioxa-2,16-diazaoctadec-18-yl]-N-methyl-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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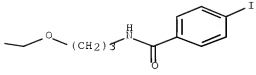
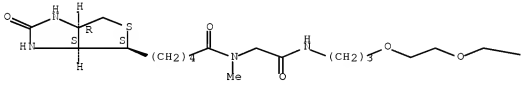


RN 194920-61-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[18-[4-(iodo-125I)phenyl]-2,18-dioxo-7,10,13-trioxa-3,17-diazaoctadec-1-yl]-N-methyl-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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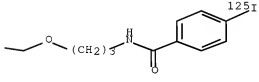
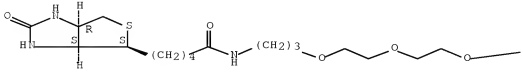


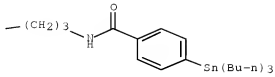
RN 194920-64-4 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-2-oxo-N-[15-oxo-15-[4-(tributylstannyl)phenyl]-4,7,10-trioxa-14-azapentadec-1-yl]-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



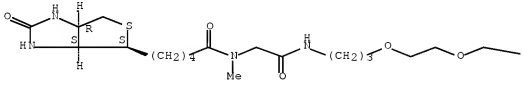
PAGE 1-B



RN 194920-71-3 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2,18-dioxo-18-[4-(tributylstannyl)phenyl]-7,10,13-trioxa-3,17-diazaoctadec-1-yl]hexahydro-N-methyl-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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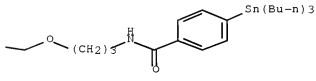
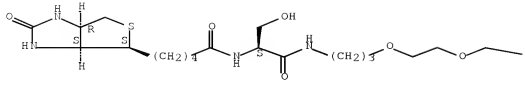


RN 351534-98-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[(1S)-1-(hydroxymethyl)-18-(4-iodophenyl)-2,18-dioxo-7,10,13-trioxa-3,17-diazaoctadec-1-yl]-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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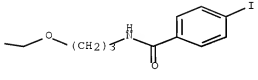
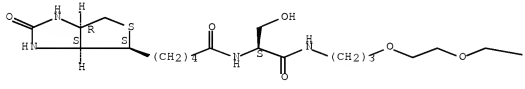


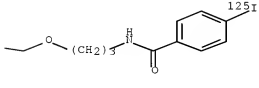
RN 351534-99-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[(1S)-1-(hydroxymethyl)-18-[4-(iodo-125I)phenyl]-2,18-dioxo-7,10,13-trioxa-3,17-diazaoctadec-1-yl]-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

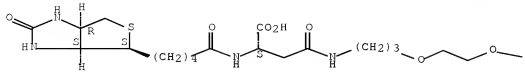


RN 351535-00-7 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosan-20-oic acid, 19-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-(4-iodophenyl)-1,17-dioxo-, (19S)- (9CI) (CA INDEX

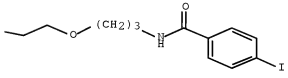
NAME)

Absolute stereochemistry.

PAGE 1-A



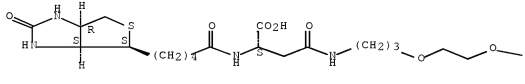
PAGE 1-B



RN 351535-01-8 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosan-20-oic acid, 19-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-[4-(iodo-125I)phenyl]-1,17-dioxo-, (19S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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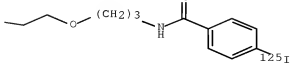
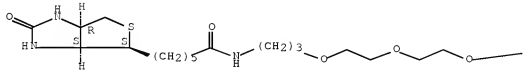


RN 351535-02-9 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanamide, hexahydro-2-oxo-N-[1-oxo-1-[4-(tributylstannyl)phenyl]-6,9,12-trioxa-2-azapentadec-15-yl]-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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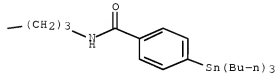

RN 351535-03-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanamide, hexahydro-N-[1-(4-iodophenyl)-1-oxo-6,9,12-trioxa-2-azapentadec-15-yl]-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

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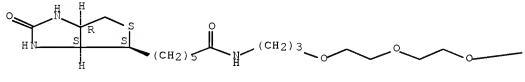

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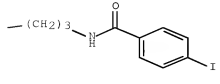

RN 351535-04-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanamide, hexahydro-N-[15-[4-(iodo-125I)phenyl]-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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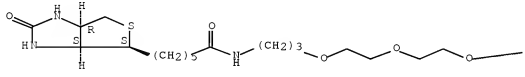

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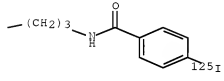

RN 351535-05-2 CAPLUS
CN Butanoic acid, 3-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4-[[15-(4-iodophenyl)-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

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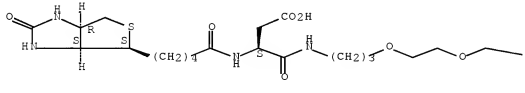

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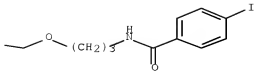

RN 351535-06-3 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosan-20-oic acid, 18-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-[4-(iodo-125I)phenyl]-1,17-dioxo-, (18S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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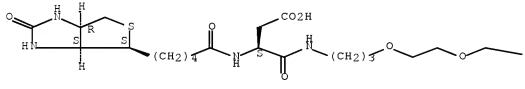

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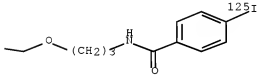
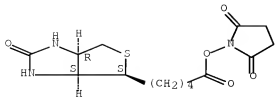


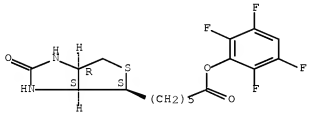
IT 35013-72-0 188014-61-1 295322-35-9
295322-41-7 295322-44-0 295322-51-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting.)
RN 35013-72-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2,5-dioxo-1-pyrrolidinyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



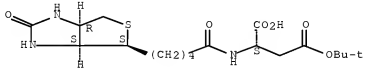
RN 188014-61-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-, 2,3,5,6-tetrafluorophenyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



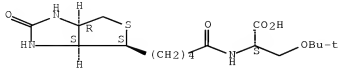
RN 295322-35-9 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 4-(1,1-dimethylethyl) ester (CA INDEX NAME)

Absolute stereochemistry.



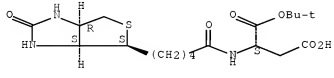
RN 295322-41-7 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



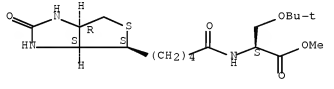
RN 295322-44-0 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 1-(1,1-dimethylethyl) ester (CA INDEX NAME)

Absolute stereochemistry.



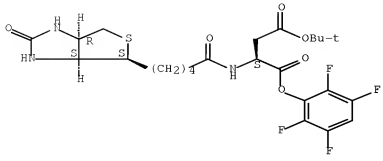
RN 295322-51-9 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.



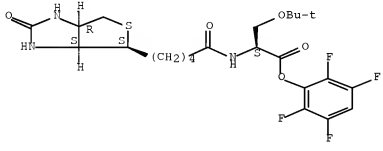
IT 295322-36-0P 295322-42-8P 295322-45-1P
295322-52-0P 295322-53-1P 351535-09-6P
351535-10-9P 351535-11-0P 351535-12-1P
351535-13-2P 351535-14-3P 351535-15-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting.)
RN 295322-36-0 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 4-(1,1-dimethylethyl) 1-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



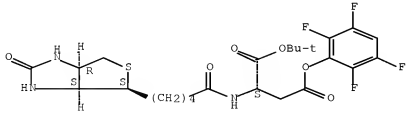
RN 295322-42-8 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 295322-45-1 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 1-(1,1-dimethylethyl) 4-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



RN 295322-52-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[(1S)-16-amino-1-(hydroxymethyl)-2-oxo-7,10,13-trioxa-3-azahexadec-1-yl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

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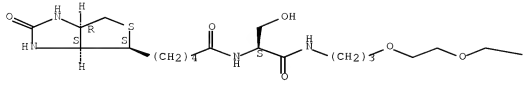

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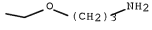

RN 295322-53-1 CAPLUS
CN 9,12,15-Trioxa-5-azaoctadecanoic acid, 18-amino-2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4-oxo-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

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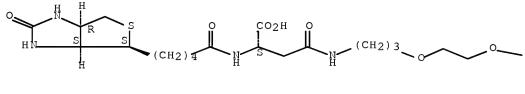

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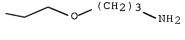
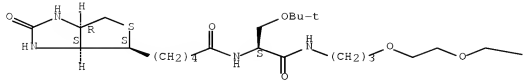


RN 351535-09-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[(1S)-1-[(1,1-dimethylethoxy)methyl]-18-(4-iodophenyl)-2,18-dioxo-7,10,13-trioxa-3,17-diazaoctadec-1-yl]hexahydro-2-oxo-, (3aS,4S,6aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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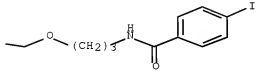

RN 351535-10-9 CAPLUS
CN 9,12,15-Trioxa-5,19-diazaeicosanoic acid,
3-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-20-(4-iodophenyl)-4,20-dioxo-, 1,1-dimethylethyl ester, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

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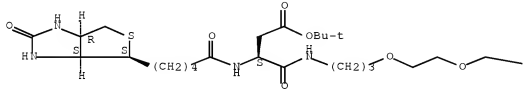

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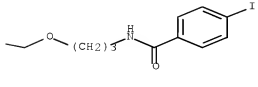
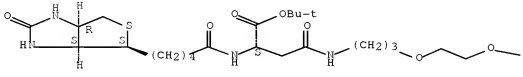


RN 351535-11-0 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosan-20-oic acid,

19-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-(4-iodophenyl)-1,17-dioxo-, 1,1-dimethylethyl ester, (19S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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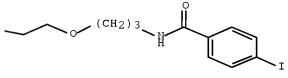

RN 351535-12-1 CAPLUS
CN 6,9,12-Trioxa-2,16,19-triazatetracosanoic acid, 18-[(1,1-dimethylethoxy)methyl]-24-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17,20-dioxo-, 1,1-dimethylethyl ester, (18S)- (CA INDEX NAME)

Absolute stereochemistry.

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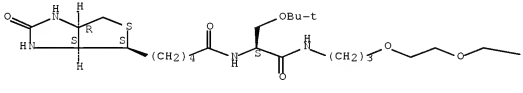
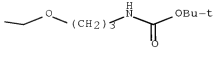


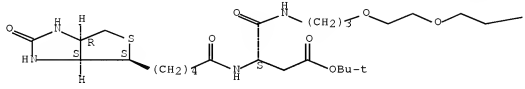
PAGE 1-B



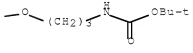
RN 351535-13-2 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosanedioic acid, 18-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-17-oxo-, 1,20-bis(1,1-dimethylethyl) ester, (18S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



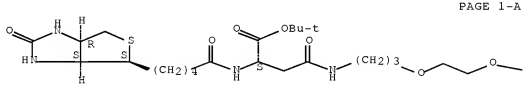
PAGE 1-B



RN 351535-14-3 CAPLUS
CN 6,9,12-Trioxa-2,16-diazaeicosanedioic acid, 19-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-17-oxo-, 1,20-bis(1,1-dimethylethyl) ester, (19S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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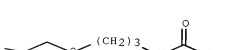
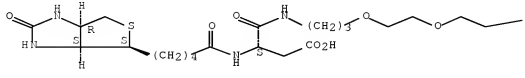


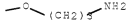
RN 351535-15-4 CAPLUS
CN Butanoic acid, 4-[[3-[2-[2-(3-aminopropoxy)ethoxy]ethoxy]propyl]amino]-3-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (28 CITINGS)
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:285808 CAPLUS Full-text
DOCUMENT NUMBER: 135:176625
TITLE: Interaction of cigarette smoke and house dust mite allergens on inflammatory mediator release from primary cultures of human bronchial epithelial cells
AUTHOR(S): Rusznak, C.; Sapsford, R. J.; Devalia, J. L.; Shah, S. S.; Hewitt, E. L.; Lamont, A. G.; Davies, R. J.; Lozewicz, S.
CORPORATE SOURCE: Academic Department of Respiratory Medicine, St Bartholomew's and the Royal London School of Medicine and Dentistry, The London Chest Hospital, London, UK
SOURCE: Clinical and Experimental Allergy (2001), 31(2), 226-238
CODEN: CLEAEN; ISSN: 0954-7894
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Several studies have shown that exposure to cigarette smoke and/or house dust mite (HDM) can lead to increased airway inflammation in susceptible individuals. The underlying mechanisms, however, are not defined. To investigate the interaction between cigarette smoke and HDM allergen on mediator release from primary cultures of human bronchial epithelial cells. Confluent human bronchial epithelial cell cultures were exposed to cigarette smoke in the absence or presence of HDM allergen and investigated for the release of IL-8, IL-1β, and sICAM-1. Damage to the epithelial cells themselves was assessed by release of 51Cr. On sep. occasions, we investigated the effect of PTL11028, a highly potent and selective Der p1

inhibitor, on HDM allergen-induced release of IL-8, following activation of HDM allergen by incubation with cysteine. The effect of cigarette smoke exposure on the stability of these released mediators in prepared solns. in the absence/presence of reduced glutathione was also studied. Both HDM allergens and short-term (20 min) cigarette smoke exposure led to a significantly increased release of IL-8, IL-1β and sICAM-1 from the epithelial cell cultures. Longer exposure (1-6 h) to cigarette smoke led to a dramatic decrease in the amount of these mediators detected in the culture medium. While incubation of epithelial cultures with HDM allergen did not cause any significant change in the release of 51Cr from pre-loaded cells, cigarette smoke on its own led to a marked, exposure and incubation-time dependent increase in the release of 51Cr. Incubation with HDM allergen led to a significant, dose and time-dependent increase in the release of IL-8, which was further enhanced when the allergen extract was pre-activated with cysteine. This effect was completely abrogated by PTL11028, a novel Der p1 inhibitor. Prepared solns. of various concns. of IL-8, IL-1β and sICAM-1 exposed to cigarette smoke demonstrated a dramatic exposure time-dependent decrease in the detectable amount of these mediators, an effect which was abrogated by GSH. HDM-induced airway inflammation may include Der p-mediated release of inflammatory mediators from epithelial cells. Addnl., short-term cigarette smoke exposure may induce airway inflammation by release of inflammatory mediators from these cells, an effect which may be potentiated by Der p allergens. Longer term cigarette smoke exposure may cause damage to epithelial cells and changes in the structure of inflammatory mediators.

CC 4-8 (Toxicology)
Section cross-reference(s): 15

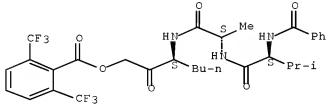
IT 187991-44-2, PTL 11028
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(interaction of cigarette smoke and house dust mite allergens on inflammatory mediator release from primary cultures of human bronchial epithelial cells)

IT 187991-44-2, PTL 11028
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(interaction of cigarette smoke and house dust mite allergens on inflammatory mediator release from primary cultures of human bronchial epithelial cells)

RN 187991-44-2 CAPLUS

CN L-Alaninamide, N-benzoyl-L-valyl-N-[(1S)-1-[[[2,6-bis(trifluoromethyl)benzoyl]oxy]acetyl]pentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

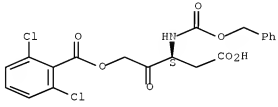
L22 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:91508 CAPLUS Full-text
DOCUMENT NUMBER: 134:131819
TITLE: Preparation of dipeptide apoptosis inhibitors
INVENTOR(S): Keana, John F. W.; Cai, Sui Xiong; Guastella, John; Yang, Wu; Drewe, John A.
PATENT ASSIGNEE(S): Cytovia, Inc., USA
SOURCE: U.S., 26 pp., Cont.-in-part of U.S. Ser. No. 168,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 6184210	B1	20010206	US 1999-270736		19990316	<--
US 6596693	B1	20030722	US 2000-653279		20000831	<--
US 20030181391	A1	20030925	US 2003-429095		20030505	<--
US 6949516	B2	20050927				
US 20050192231	A1	20050901	US 2005-100470		20050407	<--
PRIORITY APPLN. INFO.:			US 1997-61676P	P	19971010	<--
			US 1998-168945	B2	19981009	<--
			US 1999-270736	A3	19990316	<--
			US 2000-653279	A3	20000831	<--
			US 2003-429095	A3	20030505	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 134:131819
AB Dipeptides R1-AA-NHCH(CH2CO2R3)COCH2F (R1 is an N-terminal protecting group selected from Boc, Ac, or Cbz; R3 is alkyl or H; AA is a residue of an amino acid selected from Val, Ile or Leu) were prepared as apoptosis inhibitors. Thus, Cbz-Val-Asp-fmk (fmk = fluoromethyl ketone), prepared by reaction of 2-fluoroethanol with tert-Bu 3-nitropropanoate, nitro group reduction of tert-Bu 5-fluoro-4-hydroxy-3-nitropentanoate, coupling with Cbz-Valine, Dess-Martin oxidation and trifluoroacetic acid-catalyzed ester cleavage, was assayed for apoptosis inhibitory activity in several examples (IC50 = 0.04 μM for inhibition of caspase-3).
IC ICM A61K038-05
ICS C07K004-00
INCL 514019000
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
IT DNA
Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(preparation of dipeptide apoptosis inhibitors)
IT 153088-73-4 187389-52-2 187389-53-3 210344-95-9
210344-98-2 321690-65-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of dipeptide apoptosis inhibitors)
IT 153088-73-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of dipeptide apoptosis inhibitors)

RN 153088-73-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-2-oxo-3-[[(phenylmethoxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:433866 CAPLUS Full-text
DOCUMENT NUMBER: 133:248664
TITLE: Biotin Reagents for Antibody Pretargeting. 4. Selection of Biotin Conjugates for in Vivo Application Based on Their Dissociation Rate from Avidin and Streptavidin
AUTHOR(S): Wilbur, D. Scott; Chyan, Ming-Kuan; Pathare, Pradip M.; Hamlin, Donald K.; Frownfelter, Milah B.; Kegley, Brian B.
CORPORATE SOURCE: Department of Radiation Oncology, University of Washington, Seattle, WA, 98195, USA
SOURCE: Bioconjugate Chemistry (2000), 11(4), 569-583
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An investigation was conducted to determine the affect of structural variation of biotin conjugates on their dissociation rates from Av and SAv. This information was sought to help identify optimal biotin derivs. for in vivo applications. Fifteen biotin derivs. were conjugated with a cyanocobalamin (CN-Cbl) derivative for evaluation of their "relative" dissociation rates by size exclusion HPLC anal. Two biotin-CN-Cbl conjugates, one containing unaltered biotin and the other containing iminobiotin, were prepared as reference compds. for comparison purposes. The first structural variations studied involved modification of the biotinamide bond with a N-Me moiety (i.e., sarcosine conjugate), lengthening the valeric acid side chain by a methylene unit (i.e., homobiotin), and replacing the biotinamide bond with thiourea bonds in two conjugates. The rate of dissociation of the biotin-CN-Cbl derivative from Av and SAv was significantly increased for biotin derivs. containing those structural features. Nine addnl. biotin conjugates were obtained by coupling amino acids or functional group protected amino acids to the biotin moiety. In the conjugates, the biotin moiety and biotinamide bond were not altered, but substituents of various sizes were introduced α to the biotinamide bond. The results obtained from HPLC analyses indicated that the rate of dissociation from Av or SAv was not affected by small substituents α to the biotinamide (e.g., Me, hydroxymethyl, and carboxylate groups), but was

significantly increased when larger functional groups were present. On the basis of the results obtained, it appears that biotin conjugates which retain an unmodified biotin moiety and have a linker mol. conjugated to it that has a small functional group (e.g., hydroxymethylene or carboxylate) α to the biotinamide bond are excellent candidates for in vivo applications. These structural features are obtained in the biotin amino acid conjugates: biotin-serine, biotin-aspartate, biotin-lysine, and biotin-cysteine. Importantly, these biotin derivs. can be readily conjugated with other mols. for specific in vivo applications. In our studies, these derivs. will be used in the design of new biotin conjugates to carry radionuclides for cancer therapy using the pretargeting approach.

CC 6-7 (General Biochemistry)
Section cross-reference(s): 9, 26

ST biotin conjugate binding avidin streptavidin structure synthesis

IT Structure-activity relationship
(avidin-binding; biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT Molecular association
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT Avidins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 9013-20-1, Streptavidin 151009-85-7D, derivs.
295322-52-0D, derivs. 295322-53-1D, derivs.
295322-54-2D, derivs.
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 58-85-5, Biotin
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 295330-59-5P
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 58-85-5DP, Biotin, conjugates 295329-79-2P
295329-86-1P 295329-90-7P 295330-09-5P
295330-10-8P 295330-11-9P 295330-21-1P
295330-33-5P 295330-44-8P 295330-76-6P
295330-87-9P 295330-88-0P 295330-91-5P
295330-92-6P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(biotin reagents for antibody pretargeting - selection of

biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

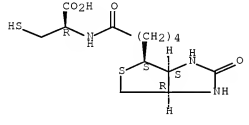
IT 98-59-9, p-Toluenesulfonyl chloride 769-39-1 1784-22-1, Homobiotin 2418-95-3 3057-74-7 4125-93-3 6160-65-2 17083-26-0 135242-89-6 142685-25-4 157720-49-5 173341-32-7 173401-47-3, Norbiotinamine 295322-35-9 295322-37-1 295322-40-6 295322-41-7 295322-44-0 295329-78-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 608-16-2P 6929-42-6P, Biotinamide 53906-36-8P 69705-14-2P 173355-35-6P 188014-61-1P 195152-91-1P 295322-34-8P 295322-36-0P 295322-39-3P 295322-42-8P 295322-43-9P 295322-45-1P 295322-48-4P 295322-49-5P 295322-51-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

IT 151009-85-7D, derivs. 295322-52-0D, derivs. 295322-53-1D, derivs. 295322-54-2D, derivs.
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

RN 151009-85-7 CAPLUS
CN L-Cysteine, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

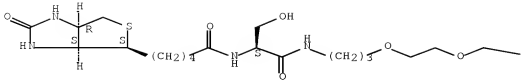
Absolute stereochemistry.



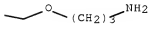
RN 295322-52-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[(1S)-16-amino-1-(hydroxymethyl)-2-oxo-7,10,13-trioxa-3-azahexadec-1-yl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



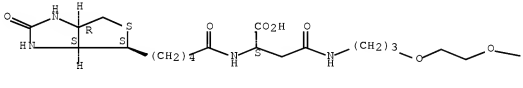
PAGE 1-B



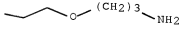
RN 295322-53-1 CAPLUS
CN 9,12,15-Trioxa-5-azaoctadecanoic acid, 18-amino-2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-4-oxo-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

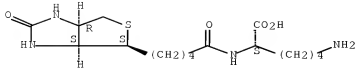


PAGE 1-B



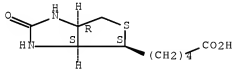
RN 295322-54-2 CAPLUS
CN L-Lysine, N2-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



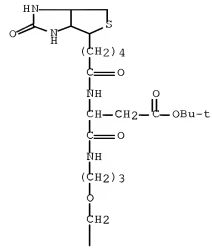
IT 58-85-5, Biotin
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)
RN 58-85-5 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 295330-59-5P
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)
RN 295330-59-5 CAPLUS
CN Cobinamide, Co-(cyano-κC)-Nc-[(16S)-16-[2-(1,1-dimethylethoxy)-2-oxoethyl]-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



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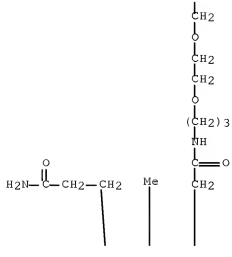

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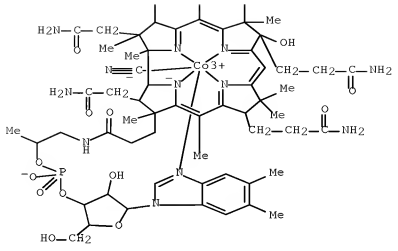
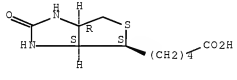


IT 58-85-5DP, Biotin, conjugates 295329-79-2P
295329-86-1P 295329-90-7P 295330-09-5P
295330-10-8P 295330-11-9P 295330-21-1P
295330-33-5P 295330-44-8P 295330-76-6P
295330-87-9P 295330-88-0P 295330-91-5P
295330-92-6P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)

RN 58-85-5 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 295329-79-2 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[19-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-oxo-4,7,10-trioxa-14-azanonadec-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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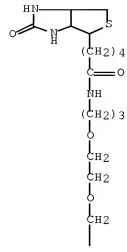

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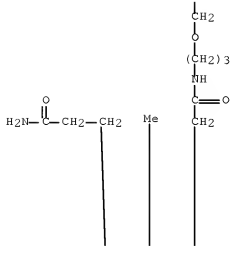

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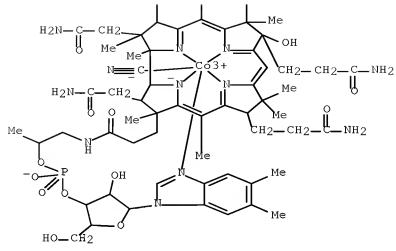

RN 295329-86-1 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[19-[(3aS,4S,6aR)-hexahydro-2-imino-1H-thieno[3,4-d]imidazol-4-yl]-15-oxo-4,7,10-trioxa-14-azanonadec-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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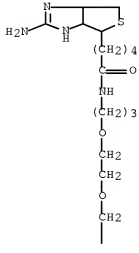

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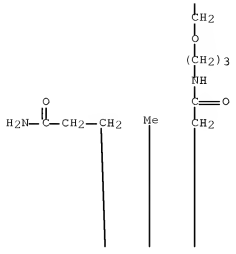

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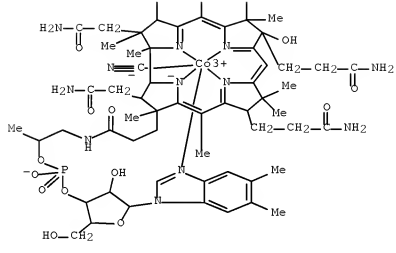

RN 295329-90-7 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-methyl-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (CA INDEX NAME)

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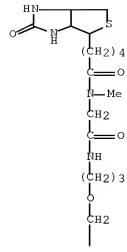

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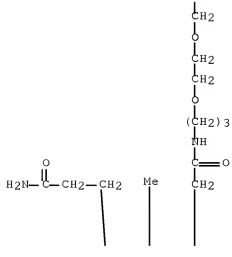

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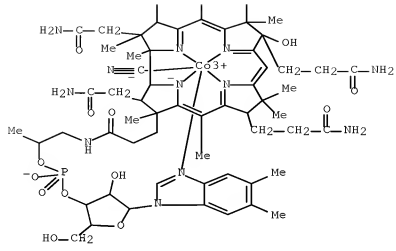

RN 295330-09-5 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[20-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-oxo-4,7,10-trioxa-14-azaeicos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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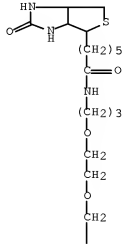

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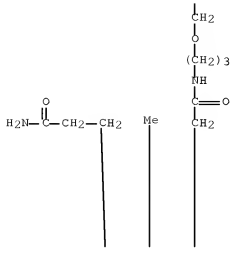

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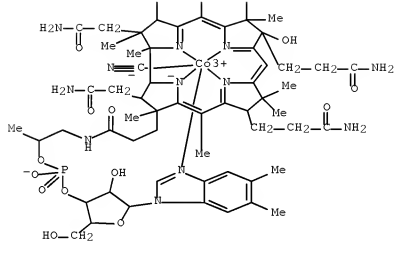

RN 295330-10-8 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[20-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-thioxo-4,7,10-trioxa-14,16-diazaeicos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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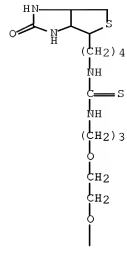

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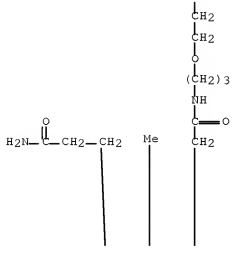

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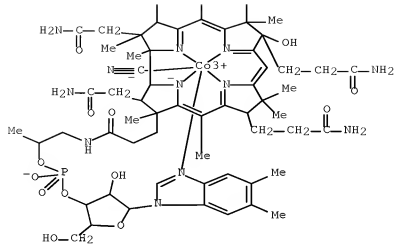

RN 295330-11-9 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[21-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15-thioxo-4,7,10-trioxa-14,16-diazaheneicos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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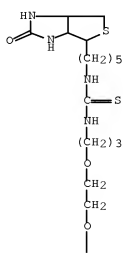

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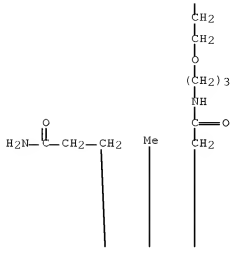

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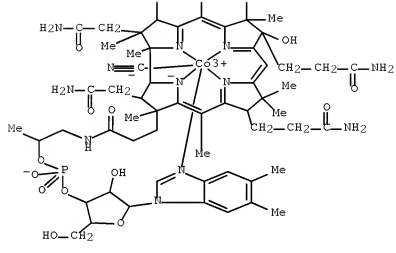

RN 295330-21-1 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[23-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-methyl-15,19-dioxo-4,7,10-trioxa-14,18-diazatricos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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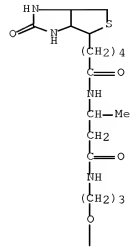

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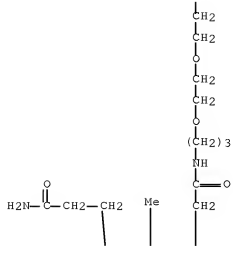

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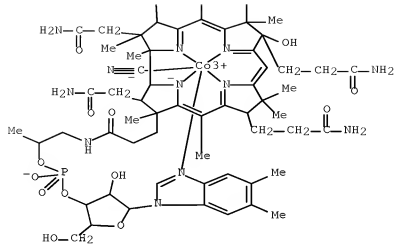

RN 295330-33-5 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[(16S)-16-[(1,1-dimethylethoxy)methyl]-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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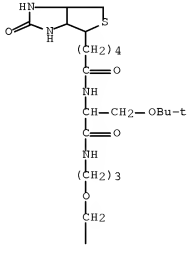

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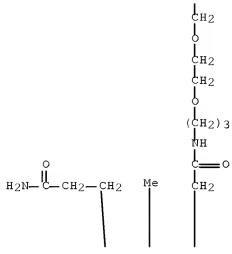

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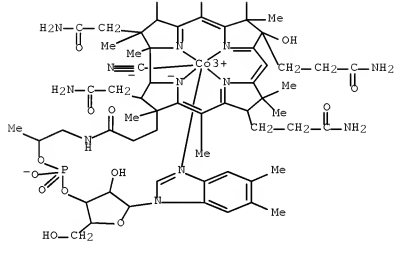

RN 295330-44-8 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[(16S)-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-16-(hydroxymethyl)-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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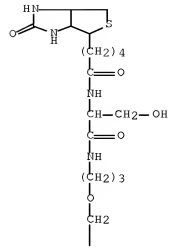

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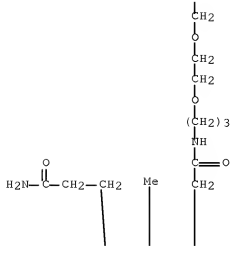

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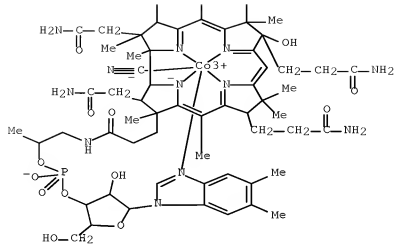

RN 295330-76-6 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[(17S)-17-[(1,1-dimethylethoxy)carbonyl]-23-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,19-dioxo-4,7,10-trioxa-14,18-diazatricos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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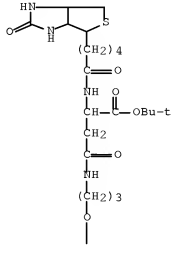

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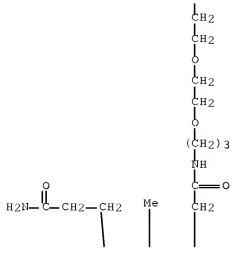

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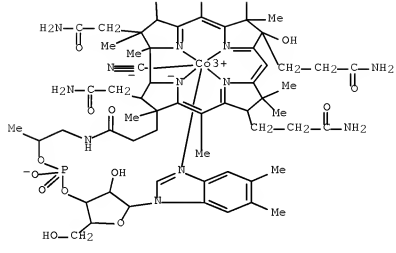

RN 295330-87-9 CAPLUS

CN Cobinamide, Co-(cyano-κC)-Nc-[(16S)-16-[4-[[(1,1-dimethylethoxy)carbonyl]amino]butyl]-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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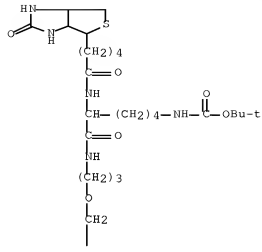

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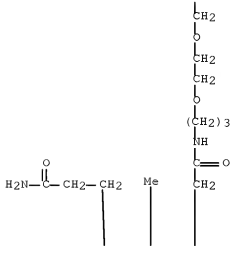

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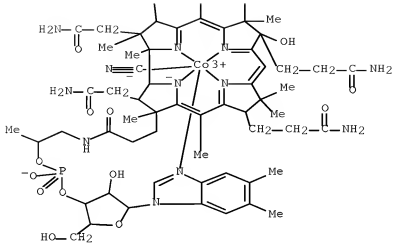

RN 295330-88-0 CAPLUS
CN Cobinamide, Nc-[(16S)-16-(carboxymethyl)-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-Co-(cyano-κC)-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

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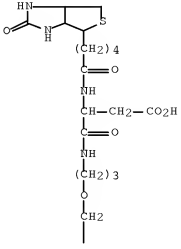

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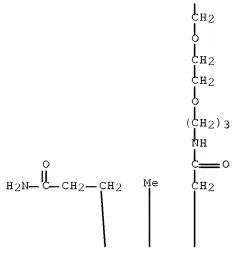
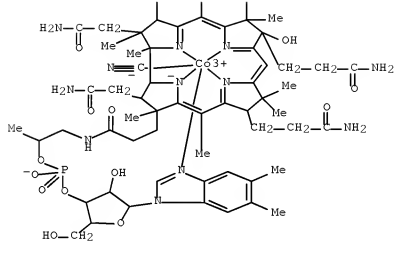


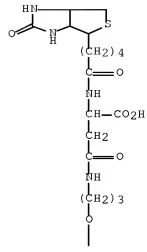
PAGE 3-A



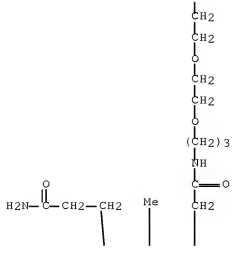
RN 295330-91-5 CAPLUS

CN Cobinamide, Nc-[(16S)-16-carboxy-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-Co-(cyano-κC)-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



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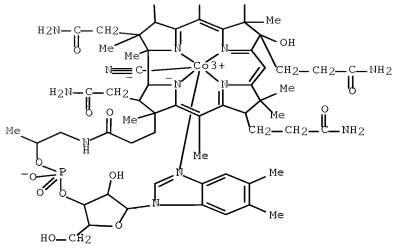
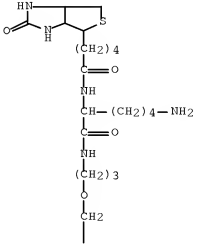


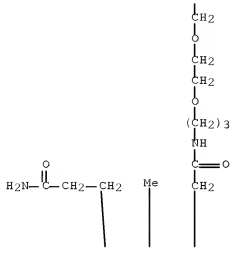
RN 295330-92-6 CAPLUS

CN Cobinamide, Nc-[(16S)-16-(4-aminobutyl)-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-15,18-dioxo-4,7,10-trioxa-14,17-diazadocos-1-yl]-Co-(cyano-κC)-8-hydroxy-, f-(dihydrogen phosphate), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3), stereoisomer (9CI) (CA INDEX NAME)

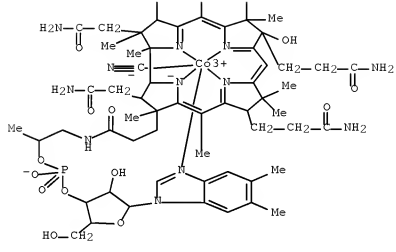
PAGE 1-A



PAGE 2-A

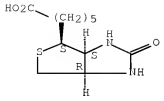


PAGE 3-A



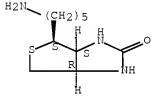
IT 1784-22-1, Homobiotin 135242-89-6
157720-49-5 173341-32-7 173401-47-3,
Norbiotinamine 295322-35-9 295322-37-1
295322-40-6 295322-41-7 295322-44-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)
RN 1784-22-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)-
(CA INDEX NAME)

Absolute stereochemistry.



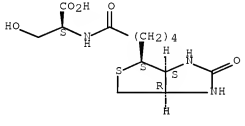
RN 135242-89-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, 4-(5-aminopentyl)tetrahydro-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



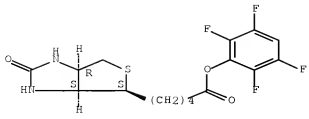
RN 157720-49-5 CAPLUS
CN L-Serine, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



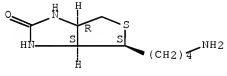
RN 173341-32-7 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2,3,5,6-tetrafluorophenyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



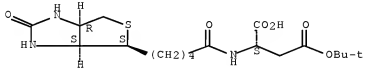
RN 173401-47-3 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, 4-(4-aminobutyl)tetrahydro-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



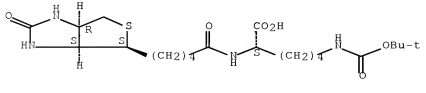
RN 295322-35-9 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 4-(1,1-dimethylethyl) ester (CA INDEX NAME)

Absolute stereochemistry.



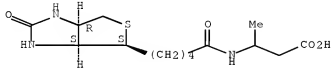
RN 295322-37-1 CAPLUS
CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



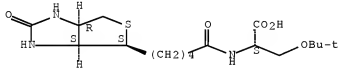
RN 295322-40-6 CAPLUS
CN Butanoic acid, 3-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.



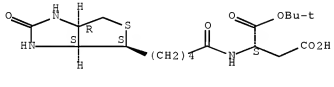
RN 295322-41-7 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 295322-44-0 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 1-(1,1-dimethylethyl) ester (CA INDEX NAME)

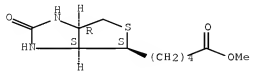
Absolute stereochemistry.



IT 608-16-2P 6929-42-6P, Biotinamide
53906-36-8P 69705-14-2P 173355-35-6P
188014-61-1P 195152-91-1P 295322-34-8P
295322-36-0P 295322-39-3P 295322-42-8P
295322-43-9P 295322-45-1P 295322-48-4P
295322-49-5P 295322-51-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biotin reagents for antibody pretargeting - selection of biotin conjugates for in vivo application based on dissociation rate from avidin and streptavidin)
RN 608-16-2 CAPLUS

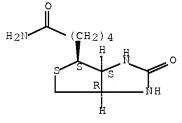
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, methyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



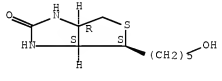
RN 6929-42-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



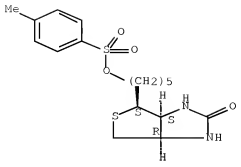
RN 53906-36-8 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, tetrahydro-4-(5-hydroxypentyl)-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



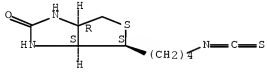
RN 69705-14-2 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, tetrahydro-4-[5-[[(4-methylphenyl)sulfonyl]oxy]pentyl]-, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



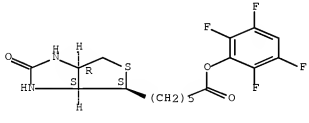
RN 173355-35-6 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one, tetrahydro-4-(4-isothiocyanatobutyl)-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



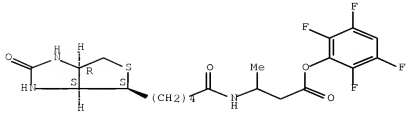
RN 188014-61-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-, 2,3,5,6-tetrafluorophenyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



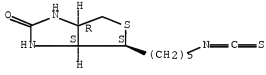
RN 195152-91-1 CAPLUS
CN Butanoic acid, 3-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



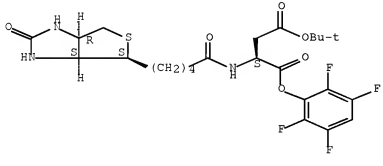
RN 295322-34-8 CAPLUS
CN 1H-Thieno[3,4-d]imidazol-2(3H)-one,
tetrahydro-4-(5-isothiocyanatopentyl)-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



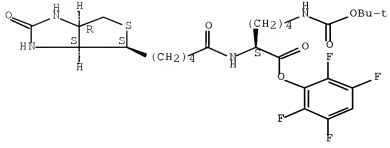
RN 295322-36-0 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 4-(1,1-dimethylethyl) 1-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



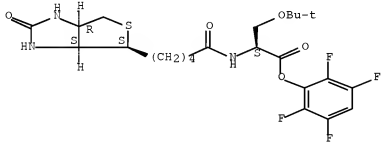
RN 295322-39-3 CAPLUS
CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



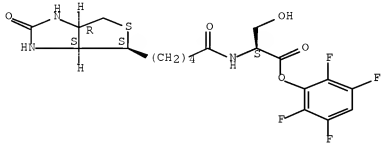
RN 295322-42-8 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 295322-43-9 CAPLUS
CN L-Serine, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

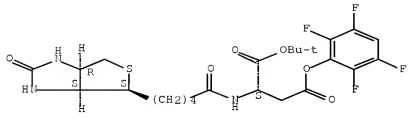
Absolute stereochemistry.



RN 295322-45-1 CAPLUS
CN L-Aspartic acid, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, 1-(1,1-dimethylethyl)

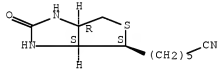
4-(2,3,5,6-tetrafluorophenyl) ester (CA INDEX NAME)

Absolute stereochemistry.



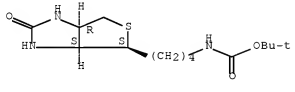
RN 295322-48-4 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-hexanenitrile, hexahydro-2-oxo-, (3aS,4S,6aR)-
(CA INDEX NAME)

Absolute stereochemistry.



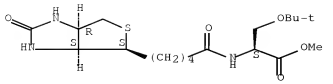
RN 295322-49-5 CAPLUS
CN Carbamic acid, [4-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-
yl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 295322-51-9 CAPLUS
CN L-Serine, O-(1,1-dimethylethyl)-N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-
thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-, methyl ester (CA INDEX NAME)

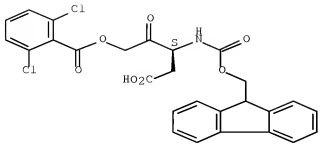
Absolute stereochemistry.



OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
REFERENCE COUNT: 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:800847 CAPLUS Full-text
DOCUMENT NUMBER: 132:208124
TITLE: A novel approach to the solid-phase synthesis of (acyloxy)methyl ketones
AUTHOR(S): Mujica, M. Teresa; Jung, Gunther
CORPORATE SOURCE: Institut Organische Chemie, Eberhard-Karls-Univ., Tubingen, D-72076, Germany
SOURCE: Synlett (1999), (12), 1933-1935
CODEN: SYNLES; ISSN: 0936-5214
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:208124
AB A procedure for the preparation of (acyloxy)methyl ketones on a solid support is reported. The key step in the synthesis includes an efficient hydrohalogenation reaction of aspartyl diazomethyl ketone compatible with Wang-resin.
CC 34-3 (Amino Acids, Peptides, and Proteins)
IT 50-30-6, 2,6-Dichlorobenzoic acid 99-34-3, 3,5-Dinitrobenzoic acid 586-38-9, 3-Methoxybenzoic acid 619-65-8, 4-Cyanobenzoic acid 632-46-2, 2,6-Dimethylbenzoic acid 771-61-9, Pentafluorophenol 2516-96-3, 2-Chloro-5-nitrobenzoic acid 119062-05-4D, Resin Bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase synthesis of (acyloxy)methyl ketones, peptidomimetics)
IT 260434-72-8P 260434-73-9P 260434-74-0P 260434-75-1P
260434-76-2P 260434-77-3P 260434-78-4P 260434-79-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of (acyloxy)methyl ketones, peptidomimetics)
IT 260434-74-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of (acyloxy)methyl ketones, peptidomimetics)
RN 260434-74-0 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-3-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-2-oxobutyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

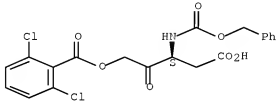
L22 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:530878 CAPLUS Full-text
DOCUMENT NUMBER: 131:189466
TITLE: Hair growth stimulants containing cysteine protease inhibitors or caspase family inhibitors
INVENTOR(S): Nakagawa, Noriaki
PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11228352	A	19990824	JP 1998-37419	19980219 <--
PRIORITY APPLN. INFO.:			JP 1998-37419	19980219 <--

AB Hair growth stimulants contain cysteine protease inhibitors or caspase family inhibitors, which suppress apoptosis occurring in catagen. Iodoacetamide (I) significantly inhibited DNA fragmentation in hair follicle-derived epithelial cells during apoptosis induction. A hair tonic containing olive oil 5.0, iso-Pr myristate 2.0, isopropylmethylphenol 0.05, polyoxyethylene nonylphenyl ether 0.5, methylparaben 0.1, EtOH 60.0, I 1.0, perfume 0.1%, and H2O balance was prepared
IC ICM A61K007-06
CC 62-3 (Essential Oils and Cosmetics)
IT 56-84-8, Aspartic acid, biological studies 144-48-9, Iodoacetamide 402-71-1, TPCK 2364-87-6, TLCK 143313-51-3 153088-73-4 169332-60-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair growth stimulants containing cysteine protease inhibitors or caspase family inhibitors)
IT 153088-73-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair growth stimulants containing cysteine protease inhibitors or caspase family inhibitors)

RN 153088-73-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, (3S)-4-carboxy-2-oxo-3-[[(phenylmethoxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.

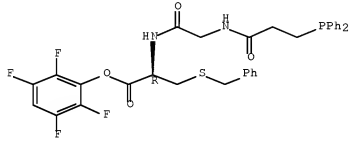


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:259857 CAPLUS Full-text
DOCUMENT NUMBER: 131:88165
TITLE: Experiments on a new phosphine-peptide chelator for labeling of peptides with Tc-99m
AUTHOR(S): Santimaria, M.; Blok, D.; Feitsma, R. I. J.; Mazzi, U.; Pauwels, E. K. J.
CORPORATE SOURCE: Department of Radiology, Division of Nuclear Medicine, Leiden University Medical Center, Leiden, 2300 RC, Neth.
SOURCE: Nuclear Medicine and Biology (1999), 26(3), 251-258
CODEN: NMBIEO; ISSN: 0969-8051
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A phosphine-containing ligand providing a N-{N-[3-(diphenylphosphino)propionyl]glycyl}-L-S-benzyl-cystein (PNNS) donor atomset for the chelation of 99mTc was studied in labeling expts. with a model peptide (tetragastrin, cholecystokinin-fragment). The peptide was conjugated to the ligand chelator by active ester chemical either before or after radiolabeling. Both the chelator-conjugate and the preformed chelate approaches resulted in the same radiolabeled isomers of the ligand peptide. Sequence and reaction conditions influence yield and purity.
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8, 78
ST peptide ligand prepn chelation technetium 99m scintigraphy
IT Chelation
Scintigraphy
(expts. on a new phosphine-peptide chelator for labeling of peptides with 99mTc)
IT Peptides, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(expts. on a new phosphine-peptide chelator for labeling of peptides with 99mTc)
IT 170278-49-6P 191981-60-9P 229163-58-0P 229163-60-4P
229483-09-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of in the synthesis of phosphine-peptide chelator 99mTc-labeled peptides)
IT 229483-10-7P 229483-11-8P 229483-12-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of as phosphine-peptide chelator 99mTc-labeled peptides)
IT 1947-37-1, 4-7-Cholecystokinin-7 (swine) 23288-60-0 170278-50-9 170278-51-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of in the synthesis of phosphine-peptide chelator 99mTc-labeled peptides)
IT 229163-58-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of in the synthesis of phosphine-peptide chelator 99mTc-labeled peptides)
RN 229163-58-0 CAPLUS
CN L-Cysteine, N-[3-(diphenylphosphino)-1-oxopropyl]glycyl-S-(phenylmethyl)-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:166524 CAPLUS Full-text
DOCUMENT NUMBER: 130:231396
TITLE: Combinatorial library
INVENTOR(S): Pollak, Alfred; Thornback, John; Roe, David; Wong, Ernest
PATENT ASSIGNEE(S): Resolution Pharmaceuticals Inc., Can.
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9910016	A1	19990304	WO 1998-CA801	19980821 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,

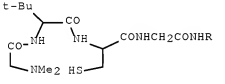
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, UZ, VN, YU, ZW
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2341969 A1 19990304 CA 1998-2341969 19980821 <--
AU 9888493 A 19990316 AU 1998-88493 19980821 <--
EP 1007106 A1 20000614 EP 1998-940025 19980821 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

PRIORITY APPLN. INFO.: US 1997-56531P P 19970821 <--
CA 1997-2214704 A 19970905 <--
US 1997-67403P P 19971205 <--
WO 1998-CA801 W 19980821 <--

OTHER SOURCE(S): MARPAT 130:231396

GI



I

AB Combinatorial libraries containing chelator compds., such as I (R = polypeptide, a mixture of potential targeting mols.) (H3L) and ReOL were prepared The chelator compds. maybe complexed with metals and metal radionuclides for imaging applications or reactive Re complexes for radiotherapy. These libraries are useful in identifying labeled compds. which exhibit a desired targeting activity.

IC ICM A61K051-04
ICS A61K051-08; A61K049-00; C07K001-04

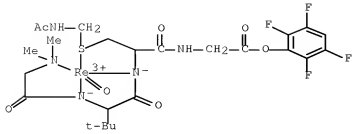
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 8, 34

IT 221034-26-0P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of)

IT 221034-26-0P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of)

RN 221034-26-0 CAPLUS

CN Rhenium(1+), oxo[2,3,5,6-tetrafluorophenyl N,N-dimethylglycyl-κN-3-methyl-L-valyl-κN-S-[(acetylamino)methyl]-L-cysteinyl-κN,κS-glycinato(2-)]-, (SP-5-25)- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:568911 CAPLUS Full-text
DOCUMENT NUMBER: 129:184238
ORIGINAL REFERENCE NO.: 129:37273a,37276a
TITLE: Screening for thymocyte caspase activity modulators
INVENTOR(S): Reinherz, Ellis; Clayton, Linda; Ocain, Timothy D.; Patch, Raymond J.
PATENT ASSIGNEE(S): Dana Farber Cancer Institute, USA; Procept, Inc.
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

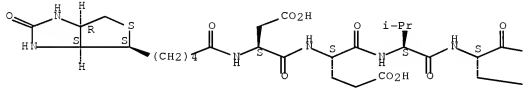
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836057	A1	19980820	WO 1998-US3524	19980217
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 7247438	B1	20070724	US 1997-948124	19971009
PRIORITY APPLN. INFO.:			US 1997-802474 A	19970218
			US 1997-948124 A	19971009

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB Work described herein shows that T cell receptor triggering by peptide/MHC ligands activates a caspase in thymocytes, including CD4+CD8+ double pos. thymocytes, resulting in their death. Methods of inhibiting apoptosis in thymocytes are described, as well as assays for identifying an agent which alters the activity of the caspase are described.
IC ICM C12N009-50
CC 1-1 (Pharmacology)
Section cross-reference(s): 7
IT 187389-52-2P 191666-52-1P 211918-95-5P
211918-96-6P 211918-97-7P 211918-98-8P 211918-99-9P
211919-00-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(screening for thymocyte caspase activity modulators)
IT 211918-91-1P 211918-92-2P 211918-93-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

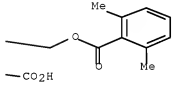
(Reactant or reagent)
(screening for thymocyte caspase activity modulators)
IT 191666-52-1P 211918-96-6P 211918-99-9P
211919-00-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(screening for thymocyte caspase activity modulators)
RN 191666-52-1 CAPLUS
CN L-Valinamide, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-α-aspartyl-L-α-glutamyl-N-[(1S)-1-(carboxymethyl)-3-[(2,6-dimethylbenzoyl)oxy]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



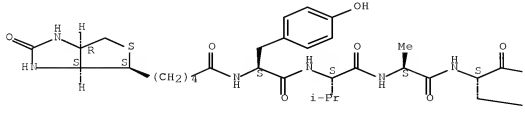
PAGE 1-B



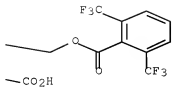
RN 211918-96-6 CAPLUS
CN L-Alaninamide, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-tyrosyl-L-valyl-N-[(1S)-3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-1-(carboxymethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



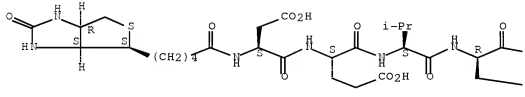
PAGE 1-B



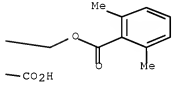
RN 211918-99-9 CAPLUS
CN L-Valinamide, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-α-aspartyl-L-α-glutamyl-N-[(1R)-1-(carboxymethyl)-3-[(2,6-dimethylbenzoyl)oxy]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



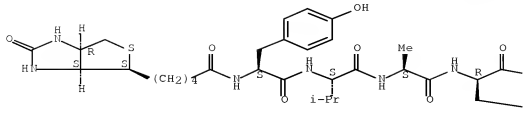
PAGE 1-B



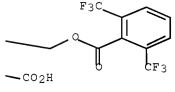
RN 211919-00-5 CAPLUS
CN L-Alaninamide, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-tyrosyl-L-valyl-N-[(1R)-3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-1-(carboxymethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

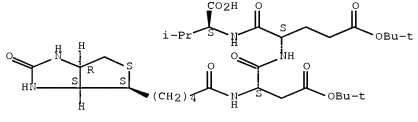


PAGE 1-B



IT 211918-91-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(screening for thymocyte caspase activity modulators)
RN 211918-91-1 CAPLUS
CN L-Valine, N-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-α-asparty1-L-α-glutamyl-, 2,3-bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:717935 CAPLUS Full-text
DOCUMENT NUMBER: 128:1461
ORIGINAL REFERENCE NO.: 128:331a,334a

TITLE: Substrates and inhibitors of proteolytic enzymes
INVENTOR(S): Quibell, Martin; Johnson, Tony; Hart, Terance
PATENT ASSIGNEE(S): Peptide Therapeutics Ltd., UK; Quibell, Martin; Johnson, Tony; Hart, Terance
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9740065	A2	19971030	WO 1997-GB1157	19970424 <--
WO 9740065	A3	19971204		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2252508	A1	19971030	CA 1997-2252508	19970424 <--
AU 9726449	A	19971112	AU 1997-26449	19970424 <--
AU 706855	B2	19990624		
CA 2252408	A1	19971113	CA 1997-2252408	19970424 <--
EP 906333	A2	19990407	EP 1997-918252	19970424 <--
EP 906333	B1	20010725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001501170	T	20010130	JP 1997-537864	19970424 <--
JP 4215822	B2	20090128		
AT 203545	T	20010815	AT 1997-918252	19970424 <--
ES 2162277	T3	20011216	ES 1997-918252	19970424 <--
US 6528275	B1	20030304	US 1999-171680	19991103 <--
US 20030092067	A1	20030515	US 2002-259420	20020930 <--

PRIORITY APPLN. INFO.:
GB 1996-8457 A 19960424 <--
GB 1996-16115 A 19960731 <--
GB 1996-24584 A 19961127 <--
WO 1997-GB1157 W 19970424 <--
US 1999-171680 A3 19991103 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to the field of compds. which are substrates or inhibitors of proteolytic enzymes and to apparatus and methods for identifying substrates or inhibitors for proteolytic enzymes. We have devised a combinatorial method for the rapid identification of binding motifs which will greatly expedite the synthesis of inhibitors of a variety of proteolytic enzymes such as aspartyl proteases, serine proteases, metallo proteases and cysteinyl proteases. Some inhibitors have the formula A-B-C-D-nE-F, in which A represents a fluorescor internally quenched by F; while B, C, D, and E represent groups such that the scissile bond between any two of these groups is a suitable bond; n is an integer 1, 2, 3, or 4; and F a quencher capable of internally quenching the fluorescor A.

IC ICM C07K001-04
ICS B01J019-00; G01N033-68

CC 7-3 (Enzymes)

IT Peptide library
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(combinatorial FRET (fluorescence resonance energy transfer)

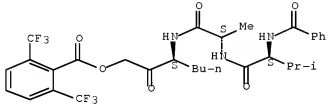
libraries of proteinase inhibitors; substrates and inhibitors of proteolytic enzymes)

IT 73300-75-1P 187991-44-2P 187991-45-3P 187991-46-4P
187991-47-5P 187991-48-6P 187991-49-7P 187991-51-1P
187991-52-2P 187991-53-3P 187991-54-4P 187991-61-3P 187991-62-4P
187991-63-5P 187991-64-6P 187991-73-7P 187991-74-8P 187991-75-9P
187991-77-1P 198839-31-5P 198839-32-6P 198839-33-7P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(substrates and inhibitors of proteolytic enzymes)

IT 187991-44-2P 187991-47-5P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(substrates and inhibitors of proteolytic enzymes)

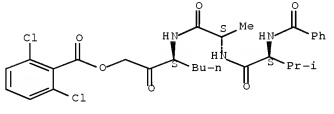
RN 187991-44-2 CAPLUS
CN L-Alaninamide, N-benzoyl-L-valyl-N-[(1S)-1-[[[2,6-bis(trifluoromethyl)benzoyl]oxy]acetyl]pentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 187991-47-5 CAPLUS
CN L-Alaninamide, N-benzoyl-L-valyl-N-[(1S)-1-[[(2,6-dichlorobenzoyl)oxy]acetyl]pentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:206852 CAPLUS Full-text
DOCUMENT NUMBER: 126:274659
ORIGINAL REFERENCE NO.: 126:53161a,53164a

TITLE: Use of inhibitors to identify essential cysteine proteinases of Trichomonas vaginalis
AUTHOR(S): Irvine, Joseph W.; North, Michael J.; Coombs, Graham H.
CORPORATE SOURCE: Infection and Immunity, Institute of Biological and Life Sciences, Joseph Black Building, University of Glasgow, Glasgow, G12 8QQ, UK
SOURCE: FEMS Microbiology Letters (1997), 149(1), 45-50
CODEN: FMLED7; ISSN: 0378-1097
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Designing cysteine proteinase inhibitors as antitrichomonal drugs requires knowledge of which cysteine proteinases are essential to the parasite. To obtain such information, the effects of a number of cysteine proteinase inhibitors on trichomonad growth in vitro and proteinase activity were investigated. The broad specificity inhibitor trans-epoxysuccinyl-L-leucylamido-(4-guanidino)butane (known as E-64) had little effect on growth of Trichomonas vaginalis (27% inhibition at 280 μM, none at 28 μM) even though the addition of 2.8 μM E-64 to growth medium resulted in inhibition of all but two (apparent mol. masses: 35 k and 49 k) of the parasite's proteinases detected by gelatin SDS-PAGE. This shows that many of the parasite's cysteine proteinases are not essential for growth in axenic culture. In contrast, a peptidyl acyloxymethyl ketone, N-benzoyloxycarbonyl-Phe-Ala-CH2OCO-(2,6,-(CF3)2)Ph, at 16 μM killed T. vaginalis and severely inhibited growth of Tritrichomonas foetus. Exposure of Trichomonas vaginalis to 16 μM of this compound for 1 h resulted in both the 35 kDa and 49 kDa proteinases being inhibited, whereas some other proteinases were unaffected. Similar distinctions between the inhibitor sensitivity of the parasite's cysteine proteinases were apparent when a biotinylated peptidyl diazomethyl ketone was used to detect active proteinases. These data suggest that the growth inhibitory effects of the peptidyl acyloxymethyl ketone are through inhibition of cysteine proteinases that are not affected when the parasites are grown in the presence of E-64. At least one of these enzymes, which include the 35 kDa and 49 kDa cysteine proteinases, must be essential and so a suitable target for chemotherapeutic attack.

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 1, 7

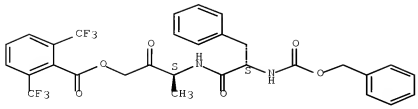
IT 115186-03-3 138674-34-7, Cysteine proteinase inhibitor
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(use of inhibitors to identify essential cysteine proteinases of Trichomonas vaginalis)

IT 115186-03-3
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(use of inhibitors to identify essential cysteine proteinases of Trichomonas vaginalis)

RN 115186-03-3 CAPLUS

CN Benzoic acid, 2,6-bis(trifluoromethyl)-, 2-oxo-3-[[1-oxo-3-phenyl-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]butyl ester, [S-(R*,R*)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L22 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:583102 CAPLUS Full-text
DOCUMENT NUMBER: 125:292311
ORIGINAL REFERENCE NO.: 125:54371a,54374a
TITLE: Cysteine protease inhibitors block schistosome hemoglobin degradation in vitro and decrease worm burden and egg production in vivo
AUTHOR(S): Wasilewski, Margaret M.; Lim, K. C.; Phillips, Jennifer; McKerrow, James H.
CORPORATE SOURCE: Department of Medicine, University of California, San Francisco, San Francisco, CA, USA
SOURCE: Molecular and Biochemical Parasitology (1996), 81(2), 179-189
CODEN: MBIPDP; ISSN: 0166-6851
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Schistosome parasites utilize Hb as a major protein source for their metabolism Degradation of Hb has been hypothesized to be mediated by both cysteine and aspartyl proteases secreted into the lumen of the parasite intestine. We now show that two distinct types of irreversible cysteine protease-specific inhibitors both arrest schistosome Hb degradation in vitro. Arrest of Hb degradation is followed by death of developing schistosomula 1 wk later. Schistosome infected mice treated by a dose of 2 mg inhibitor per day for 1 wk early in infection, and 2 wk at the time of egg production, showed a significant reduction in worm burden, hepatomegaly, and the number of eggs produced per female worm. Histopathol. showed a minimal immune response to those eggs which were produced, consistent with a delay in egg production relative to untreated infections. By tagging the inhibitor with biotin, specific cysteine protease targets were identified in exts. of schistosome worms.

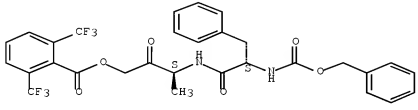
CC 1-5 (Pharmacology)

IT 105637-38-5 115186-03-3 115186-07-7 118252-93-0
118253-05-7 139323-38-9 148504-25-0 155149-67-0 156707-49-2
182950-32-9 182950-33-0 182950-34-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cysteine protease inhibitors block schistosome Hb degradation in vitro and decrease worm burden and egg production in vivo)

IT 115186-03-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cysteine protease inhibitors block schistosome Hb degradation in vitro and

decrease worm burden and egg production in vivo)
RN 115186-03-3 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, 2-oxo-3-[[1-oxo-3-phenyl-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]butyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 69 THERE ARE 69 CAPLUS RECORDS THAT CITE THIS RECORD (69 CITINGS)

L22 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:184037 CAPLUS Full-text
DOCUMENT NUMBER: 124:254781
ORIGINAL REFERENCE NO.: 124:47093a,47096a
TITLE: Conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures
INVENTOR(S): Dinkelborg, Ludger; Hilger, Christoph-Stephan; Niedballa, Ulrich; Platzek, Johannes; Raduechel, Bernd; Speck, Ulrich
PATENT ASSIGNEE(S): Schering A.-G., Germany
SOURCE: Ger. Offen., 25 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4424922	A1	19960118	DE 1994-4424922	19940714 <--
US 20020077306	A1	20020620	US 1995-488290	19950607 <--
IL 114237	A	20000831	IL 1995-114237	19950620 <--
CA 2194558	A1	19960201	CA 1995-2194558	19950630 <--
WO 9602274	A1	19960201	WO 1995-EP2539	19950630 <--
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9529791	A	19960216	AU 1995-29791	19950630 <--
EP 777498	A1	19970611	EP 1995-925792	19950630 <--
EP 777498	B1	20040428		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1152879	A	19970625	CN 1995-194000	19950630 <--
CN 1219551	C	20050921		
HU 76329	A2	19970828	HU 1997-100	19950630 <--
HU 220859	B1	20020629		

JP 10503182	T	19980324	JP 1996-504630	19950630	<--
RU 2165771	C2	20010427	RU 1997-102039	19950630	<--
AT 265229	T	20040515	AT 1995-925792	19950630	<--
PT 777498	E	20040930	PT 1995-925792	19950630	<--
ES 2220933	T3	20041216	ES 1995-925792	19950630	<--
SK 284598	B6	20050701	SK 1997-28	19950630	<--
CZ 295930	B6	20051214	CZ 1997-114	19950630	<--
ZA 9505895	A	19960219	ZA 1995-5895	19950714	<--
TW 502040	B	20020911	TW 1995-84110812	19951014	<--
NO 9700141	A	19970314	NO 1997-141	19970113	<--
NO 318585	B1	20050411			
AU 9920360	A	19990617	AU 1999-20360	19990312	<--
AU 721330	B2	20000629			
JP 2009197024	A	20090903	JP 2009-134684	20090604	<--

PRIORITY APPLN. INFO.:

DE 1994-4424922	A	19940714	<--
US 1994-336127	B2	19941104	<--
US 1994-336128	B2	19941104	<--
DE 1994-4445078	A	19941205	<--
US 1994-357573	B2	19941215	<--
US 1994-358065	B2	19941215	<--
US 1995-409813	B1	19950324	<--
AU 1995-29791	A3	19950630	<--
JP 1996-504630	A3	19950630	<--
WO 1995-EP2539	W	19950630	<--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Conjugates of modified oligonucleotides with complexes of radioactive or stable metal isotopes, which bind specifically to biol. target structures, are useful in diagnostic imaging and radiotherapy. The oligonucleotides are modified to render them resistant to degradation by endogenous nucleases, e.g. by O-alkylation, halogenation, amination, or reduction at the 2' position or by replacement of phosphodiester groups by phosphorothioate, phosphorodithioate, or alkylphosphonate linkages. The oligonucleotides are selected from a random mixture for binding to a target such as a non-nucleic acid macromol., tissue, or organ. Thus, a 30-mer oligonucleotide ligand for NGF was conjugated with the linker β-cyanoethyl N,N-diisopropylamino-6-(trifluoroacetamido)-1- hexylphosphoramidite, then with 10-[7-(4-isothiocyanatophenyl)-2-hydroxy-5- oxo-7-(carboxymethyl)-4-azaheptyl]-1,4,7-tris(carboxymethyl)-1,4,7,10- tetraazacyclododecane (preparation given), and complexed with 111In(III) for use as a radiodiagnostic agent.

IC ICM C07H021-04
ICS A61K051-00

ICA C07F009-547

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 33

IT Rare earth metals, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(complexes, with chelating agent-oligonucleotide conjugates; conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT Chelating agents
(conjugates with oligonucleotides; conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT Radioelements, biological studies
Transition metal compounds
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(complexes, with chelating agent-oligonucleotide conjugates; conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT 10098-91-6DP, Yttrium-90, complex with oligonucleotide-chelating agent conjugate, biological studies 13981-25-4DP, Copper-64, complex with oligonucleotide-chelating agent conjugate, biological studies 14119-09-6DP, Gallium-67, complex with oligonucleotide-chelating agent conjugate, biological studies 14133-76-7DP, Technetium-99, complexes with oligonucleotide-chelating agent conjugates, biological studies 14913-49-6DP, Bismuth-212, complex with oligonucleotide-chelating agent conjugate, biological studies 15750-15-9DP, Indium-111, complex with oligonucleotide-chelating agent conjugate, biological studies 175279-02-4DP, technetium-99m complexes 175279-03-5DP, yttrium-90 complexes 175387-29-8DP, indium-111 complexes 175387-30-1DP, bismuth-212 complexes 175387-32-3DP, technetium-99m complexes 175387-33-4DP, technetium-99m complexes 175387-34-5DP, technetium-99m complexes 175387-35-6DP, copper-64 complex 175387-36-7DP, yttrium-90 complexes 175387-37-8DP, gallium-67 complex 175387-39-0DP, technetium-99m complexes 175387-40-3DP, technetium-99m complexes 175387-42-5DP, technetium-99m complexes 175387-44-7DP, technetium-99m complexes 175387-45-8DP, technetium-99m complexes 175387-46-9DP, yttrium-90 complexes RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT 7429-91-6D, Dysprosium, complexes with chelating agent-oligonucleotide conjugates 7439-88-5D, Iridium, complexes with chelating agent-oligonucleotide conjugates 7439-89-6D, Iron, complexes with chelating agent-oligonucleotide conjugates 7439-91-0D, Lanthanum, complexes with chelating agent-oligonucleotide conjugates 7439-92-1D, Lead, complexes with chelating agent-oligonucleotide conjugates 7439-94-3D, Lutetium, complexes with chelating agent-oligonucleotide conjugates 7439-96-5D, Manganese, complexes with chelating agent-oligonucleotide conjugates 7439-97-6D, Mercury, complexes with chelating agent-oligonucleotide conjugates 7439-98-7D, Molybdenum, complexes with chelating agent-oligonucleotide conjugates 7440-00-8D, Neodymium, complexes with chelating agent-oligonucleotide conjugates 7440-02-0D, Nickel, complexes with chelating agent-oligonucleotide conjugates 7440-04-2D, Osmium, complexes with chelating agent-oligonucleotide conjugates 7440-06-4D, Platinum, complexes with chelating agent-oligonucleotide conjugates 7440-10-0D, Praseodymium, complexes with chelating agent-oligonucleotide conjugates 7440-12-2D, Promethium, complexes with chelating agent-oligonucleotide conjugates 7440-15-5D, Rhenium, complexes with chelating agent-oligonucleotide conjugates 7440-18-8D, Ruthenium, complexes with chelating agent-oligonucleotide conjugates 7440-19-9D, Samarium, complexes with chelating agent-oligonucleotide conjugates 7440-20-2D, Scandium, complexes with chelating agent-oligonucleotide conjugates 7440-25-7D, Tantalum, complexes with chelating agent-oligonucleotide conjugates 7440-26-8D, Technetium, complexes with chelating agent-oligonucleotide conjugates 7440-27-9D, Terbium, complexes with chelating agent-oligonucleotide conjugates 7440-28-0D, Thallium, complexes with chelating agent-oligonucleotide conjugates 7440-30-4D, Thulium, complexes with chelating agent-oligonucleotide conjugates 7440-32-6D, Titanium, complexes with chelating

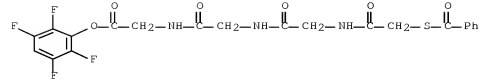
agent-oligonucleotide conjugates 7440-33-7D, Tungsten, complexes with chelating agent-oligonucleotide conjugates 7440-42-8D, Boron, complexes with chelating agent-oligonucleotide conjugates 7440-45-1D, Cerium, complexes with chelating agent-oligonucleotide conjugates 7440-47-3D, Chromium, complexes with chelating agent-oligonucleotide conjugates 7440-48-4D, Cobalt, complexes with chelating agent-oligonucleotide conjugates 7440-50-8D, Copper, complexes with chelating agent-oligonucleotide conjugates 7440-52-0D, Erbium, complexes with chelating agent-oligonucleotide conjugates 7440-53-1D, Europium, complexes with chelating agent-oligonucleotide conjugates 7440-54-2D, Gadolinium, complexes with chelating agent-oligonucleotide conjugates 7440-55-3D, Gallium, complexes with chelating agent-oligonucleotide conjugates 7440-57-5D, Gold, complexes with chelating agent-oligonucleotide conjugates 7440-58-6D, Hafnium, complexes with chelating agent-oligonucleotide conjugates 7440-60-0D, Holmium, complexes with chelating agent-oligonucleotide conjugates 7440-62-2D, Vanadium, complexes with chelating agent-oligonucleotide conjugates 7440-64-4D, Ytterbium, complexes with chelating agent-oligonucleotide conjugates 7440-65-5D, Yttrium, complexes with chelating agent-oligonucleotide conjugates 7440-68-8D, Astatine, complexes with chelating agent-oligonucleotide conjugates 7440-69-9D, Bismuth, complexes with chelating agent-oligonucleotide conjugates 7440-74-6D, Indium, complexes with chelating agent-oligonucleotide conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT 76-83-5, Triphenylmethyl chloride 2776-60-5, Glycylglycine methyl ester hydrochloride 4048-33-3, 6-Aminohexanol 4781-83-3 5437-45-6, Benzyl bromoacetate 5455-98-1, N-(2,3-Epoxypropyl)phthalimide 6066-82-6, N-Hydroxysuccinimide 34805-17-9 34914-36-8 53911-69-6 81186-33-6 84611-23-4 86030-43-5 114873-37-9, 1,4,7-Tris(carboxymethyl)-1,4,7,10-tetraazacyclododecane 116919-17-6 121557-52-6 121806-83-5 122497-12-5 131274-04-9 133975-85-6 137174-07-3 155269-64-0 157022-76-9 159639-90-4 164575-76-2 174701-10-1 174701-34-9 174701-35-0 175387-46-9 175387-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

IT 121557-52-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(conjugates of metal complexes and oligoribonucleotides which bind specifically to selected target structures)

RN 121557-52-6 CAPLUS

CN Glycine, N-[2-(benzoylthio)acetyl]glycylglycyl-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)



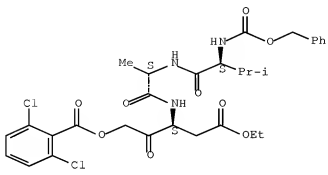
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L22 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:637254 CAPLUS Full-text
DOCUMENT NUMBER: 123:74430
ORIGINAL REFERENCE NO.: 123:12947a,12950a
TITLE: Reduction of inflammation and pyrexia in the rat by oral administration of SDZ 224-015, an inhibitor of the interleukin-1β converting enzyme
AUTHOR(S): Elford, P. R.; Heng, R.; Revesz, L.; MacKenzie, A. R.
CORPORATE SOURCE: Sandoz Res. Inst. Berne Ltd., Bern, CH-3001, Switz.
SOURCE: British Journal of Pharmacology (1995), 115(4), 601-6
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Macmillan Scientific & Medical Division
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to determine whether a synthetic inhibitor of the interleukin-1β converting enzyme (ICE) displays oral activity in models of inflammation. To this end, the ICE inhibitor, SDZ 224-015, was examined in rat paw edema, pyrexia and nociception tests. SDZ 224-015 (0.3-300 μg kg-1) potently reduced carrageenin-induced paw edema, with an oral ED50 of approx. 25 μg kg-1. This effect was independent of endogenous glucocorticoid, as shown by retention of activity upon adrenalectomy. Pyrexia induced by lipopolysaccharide (0.1 mg kg-1 s.c.) of by interleukin-1β (100 ng i.v.) was also reduced, over a similar dose-range to edema (oral ED50s 11 μg kg-1 and 4 μg kg-1 resp.). SDZ 224-015 (0.2-5 mg kg-1, p.o.) displayed analgesic activity in the Randall-Selitto yeast-inflamed paw pressure test, significant at a dose of 1 mg kg-1, p.o. Thus, SDZ 224-015 has potent oral activity in several acute models for inflammation, suggesting that ICE inhibitors may constitute a novel type of anti-inflammatory agent.

CC 1-7 (Pharmacology)
IT 161511-45-1, SDZ 224-015
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reduction of inflammation and pyrexia by SDZ 224-015, an inhibitor of the interleukin-1β converting enzyme)
IT 161511-45-1, SDZ 224-015
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reduction of inflammation and pyrexia by SDZ 224-015, an inhibitor of the interleukin-1β converting enzyme)
RN 161511-45-1 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[(1S)-3-[(2,6-dichlorobenzoyl)oxy]-1-(2-ethoxy-2-oxoethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L22 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:258755 CAPLUS Full-text
DOCUMENT NUMBER: 122:133744
ORIGINAL REFERENCE NO.: 122:24959a,24962a
TITLE: Kinetics of peptide synthesis studied by fluorescence of fluorophenyl esters
AUTHOR(S): Permyakov, Eugene A.; Medvedkin, Vyacheslav N.; Klimenko, Lyubov V.; Mitin, Yuri V.; Permyakov, Serge E., Jr.
CORPORATE SOURCE: Inst. Theoretical Exp. Biophysics, Russian Acad. Sci., Moscow, Russia
SOURCE: International Journal of Peptide & Protein Research (1994), 44(5), 472-6
CODEN: IJPPC3; ISSN: 0367-8377
PUBLISHER: Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The kinetics of peptide coupling of protected alanine active esters Boc-Ala-OR [R = 2,3,5-trifluorophenyl (Trf), p-chlorotetrafluorophenyl (Tfc), pentafluorophenyl (Pfp), 2,3,5,6-tetrafluorophenyl (Tfp)] with leucine amide and valine Me ester have been measured using changes in fluorophenyl chromophore emission at 375 nm. The kinetic data cannot be well fit with a simple second-order reaction scheme. Measurements of the reaction kinetics at different concns. of the reagents showed that the expression for the reaction rate is V = kCN0.5CAE1.5, in which k is the reaction rate constant, CN is the concentration of either H-Leu-NH2 or H-Val-OMe, and CAE is the concentration of the fluorophenyl ester. This reaction equation indicates a complex, probably chain-like, reaction mechanism. The order of reactivity for these active esters with H-Val-OMe is Tfc > Pfp > Tfp > Trf. The apparent rate constant, k, for the reaction with H-Leu-NH2 is higher than that for the reaction with H-Val-OMe.

CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 22

IT Amino acids, reactions
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(esters, fluorophenyl esters; kinetics of peptide synthesis via fluorescence of fluorophenyl esters)

IT Kinetics of amidation

(peptide coupling, kinetics of peptide synthesis via fluorescence of fluorophenyl esters)

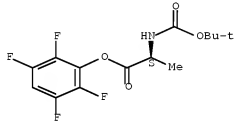
IT 6306-52-1, Valine methyl ester hydrochloride 10466-61-2, Leucine amide hydrochloride 50903-48-5, N-tert-Butoxycarbonylalanine pentafluorophenyl ester 125363-80-6, N-tert-Butoxycarbonylalanine 2,3,5,6-tetrafluorophenyl ester 131526-06-2, L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-, 4-chloro-2,3,5,6-tetrafluorophenyl ester 160948-60-7
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(kinetics of peptide synthesis via fluorescence of fluorophenyl esters)

IT 125363-80-6, N-tert-Butoxycarbonylalanine 2,3,5,6-tetrafluorophenyl ester
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(kinetics of peptide synthesis via fluorescence of fluorophenyl esters)

RN 125363-80-6 CAPLUS

CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:264340 CAPLUS Full-text

DOCUMENT NUMBER: 120:264340

ORIGINAL REFERENCE NO.: 120:46661a,46664a

TITLE: Inactivation of Interleukin-1β Converting Enzyme by Peptide (Acyloxy)methyl Ketones

AUTHOR(S): Thornberry, Nancy A.; Peterson, Erin P.; Zhao, Justin J.; Howard, Andrew D.; Griffin, Patrick R.; Chapman, Kevin T.

CORPORATE SOURCE: Department of Enzymology Medicinal Chemical Research, Merck Research Laboratories, Rahway, NJ, 07065, USA

SOURCE: Biochemistry (1994), 33(13), 3934-40
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Interleukin-1β converting enzyme (ICE) is a cysteine protease in monocytes that is essential for the proteolytic activation of interleukin-1β, an important mediator of inflammation. Peptide (acyloxy)methyl ketones designed with the appropriate peptide recognition sequence (Ac-Tyr-Val-Ala-Asp-CH2OC(O)Ar) are potent, competitive, irreversible inhibitors. Mass spectrometry and sequence anal. indicate that inactivation proceeds through expulsion of the carboxylate leaving group to form a thiomethyl ketone with

the active site Cys285. The second-order inactivation rate is independent of leaving group pKa, with an approx. value of 1 × 106 M-1 s-1. This rate constant is directly proportional to the reaction macroviscosity, indicating that the rate-limiting step in inactivation is association of enzyme and inhibitor, rather than any bond-forming reactions. Affinity labeling of THP.1 monocytic cell cytosol with a biotinylated tetrapeptide (acyloxy)methyl ketone for 28 half-lives resulted in labeling of only the converting enzyme, demonstrating the selectivity of these inhibitors. These inhibitors are relatively inert toward other bionucleophiles such as glutathione (<5 × 10-4 M-1 s-1), making them excellent candidates for in vivo studies of enzyme inhibition.

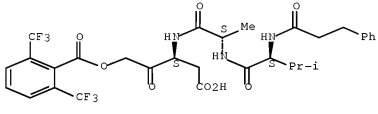
CC 7-3 (Enzymes)
Section cross-reference(s): 1

IT 151272-16-1P 151272-17-2P 154674-81-4P
154674-82-5P 154674-83-6P 154674-84-7P 154674-85-8P
154674-86-9P 154674-87-0P 154674-88-1P 154674-89-2P 154674-90-5P
154674-91-6P 154719-25-2P 154719-26-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and human interleukin-1β-converting enzyme inhibition by, structure in relation to)

IT 151272-16-1P 154674-82-5P 154719-25-2P
154719-26-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and human interleukin-1β-converting enzyme inhibition by, structure in relation to)

RN 151272-16-1 CAPLUS
CN L-Alaninamide, N-(1-oxo-3-phenylpropyl)-L-valyl-N-[(1S)-3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-1-(carboxymethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

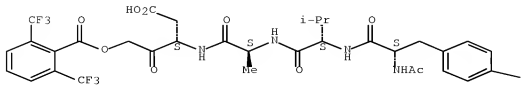
Absolute stereochemistry.



RN 154674-82-5 CAPLUS
CN L-Alaninamide, N-acetyl-L-tyrosyl-L-valyl-N-[(1S)-3-[[2,6-bis(trifluoromethyl)benzoyl]oxy]-1-(carboxymethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

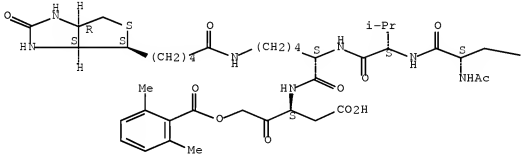


PAGE 1-B

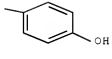
RN 154719-25-2 CAPLUS
CN L-Lysinamide, N-acetyl-L-tyrosyl-L-valyl-N-[(1S)-1-(carboxymethyl)-3-[(2,6-dimethylbenzoyl)oxy]-2-oxopropyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

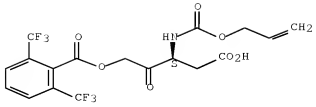


PAGE 1-B



RN 154719-26-3 CAPLUS
CN Benzoic acid, 2,6-bis(trifluoromethyl)-, (3S)-4-carboxy-2-oxo-3-[[(2-propen-1-yloxy)carbonyl]amino]butyl ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 185 THERE ARE 185 CAPLUS RECORDS THAT CITE THIS RECORD (187 CITINGS)

L22 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:77637 CAPLUS Full-text
DOCUMENT NUMBER: 120:77637
ORIGINAL REFERENCE NO.: 120:13989a,13992a
TITLE: Preparation of peptides useful for inhibiting IL-1β release
INVENTOR(S): Heng, Richard; Payne, Trevor Glyn; Revesz, Laszlo; Weidmann, Beat
PATENT ASSIGNEE(S): Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H., Austria; Sandoz-Patent-G.m.b.H.; Sandoz Ltd.
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9309135	A1	19930513	WO 1992-EP2472	19921029 <--
W: AU, CA, CS, FI, HU, JP, KR, NO, PL, RO, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
AU 9228852	A	19930607	AU 1992-28852	19921029 <--
EP 611375	A1	19940824	EP 1992-922580	19921029 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
JP 07500828	T	19950126	JP 1992-508146	19921029 <--
HU 68200	A2	19950529	HU 1994-1303	19921029 <--
ZA 9208511	A	19940504	ZA 1992-8511	19921104 <--
CN 1094730	A	19941109	CN 1993-105500	19930503 <--
NO 9401629	A	19940704	NO 1994-1629	19940503 <--
FI 9402061	A	19940504	FI 1994-2061	19940504 <--
PRIORITY APPLN. INFO.:			GB 1991-23326 A	19911104 <--
			WO 1992-EP2472 A	19921029 <--

OTHER SOURCE(S): MARPAT 120:77637

AB R(A1A2)nA3A4XA5 [R = H, protecting group, (substituted) PhCH2O; n = 0, 1; A1 = Val, Leu, Ala, Ile, trimethylsilylalanyl; A2 = Phe, Tyr; A3 = bond, A1, (substituted) C6H4CO; A4 = bond, NR1CHY1CO; Y1 = α-amino acid residue, (protected) dialkylaminoethyl, imidazol-2-ylmethyl, pyrazol-3-ylmethyl, (substituted) PhCH2, etc.; A3A4 = NHCHR1aCONR1CHY1CO; R1aR1 = (CH2)2-5; X = NR6CH(CH2CO2H)CO, NR6CH(CH2CO2H)COCO, NR6CH(CH2CO2H)CH:NNHCO, NR6CH(CH2CO2H)CH(OH), NR6CH(CH2CO2H)COCH:CH, etc.; R6 = H, alkyl; A5 = H, CF3, Z1Z2Y2, etc.; Z1, Z2 = bond, α-amino acid residue; Y2 = NH2(di)alkylamino, heterocyclyl] were prepared Thus, Z-Val-Met-Asp-H (preparation given) was stirred with semicarbazide hydrochloride and pyridine in MeOH to give the semicarbazone, which was stirred with H2NNHCO-Pro-Val-NMe2 in

MeOH/pyridine/H2O/HCl to give Z-Val-Met-NHCH(CH2CO2H)CH:NNHCO-Pro-Val-NMe2. Certain I inhibited IL-1β release from THP-1 cells (IC50 = .apprx.0.01-100 μM), while leaving IL-6, TNF-α, PGE2, and DNA levels unaffected. I significantly inhibited carrageenan-induced paw edema in rats at 0.02-5 mg/kg orally.

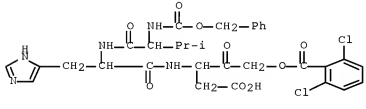
IC ICM C07K005-04
ICS C07K005-06; A61K037-02

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1

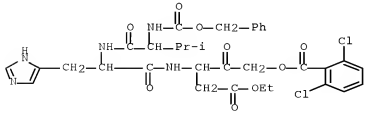
IT 151544-21-7P 151544-22-8P 151544-23-9P 151544-24-0P 151544-25-1P
151544-26-2P 151544-27-3P 151544-28-4P 151544-29-5P 151544-30-8P
151544-31-9P 151544-32-0P 151544-33-1P
151544-34-2P 151544-35-3P 151544-36-4P
151544-37-5P 151544-38-6P 151544-39-7P 151544-40-0P
151544-41-1P 151544-42-2P 151544-43-3P
151544-44-4P 151594-00-2P 151594-01-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as inhibitor of IL-1β release)

IT 151544-31-9P 151544-32-0P 151544-35-3P
151544-36-4P 151544-40-0P 151544-42-2P
151544-43-3P 151544-44-4P 151594-00-2P
151594-01-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as inhibitor of IL-1β release)

RN 151544-31-9 CAPLUS
CN L-Histidinamide, N-[(phenylmethoxy)carbonyl]-D-valyl-N-[1-(carboxymethyl)-3-[(2,6-dichlorobenzoyl)oxy]-2-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)

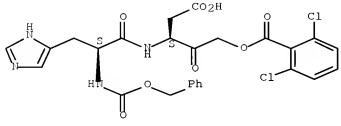


RN 151544-32-0 CAPLUS
CN L-Histidinamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[3-[(2,6-dichlorobenzoyl)oxy]-1-(2-ethoxy-2-oxoethyl)-2-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)



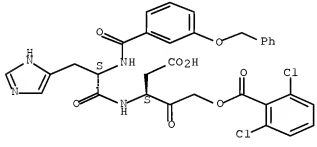
RN 151544-35-3 CAPLUS
CN Benzoic acid, 2,6-dichloro-, 4-carboxy-3-[[3-(1H-imidazol-4-yl)-1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]-2-oxobutyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

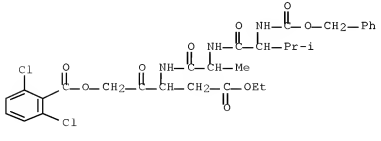


RN 151544-36-4 CAPLUS
CN Benzoic acid, 2,6-dichloro-, 4-carboxy-3-[[3-(1H-imidazol-4-yl)-1-oxo-2-[[3-(phenylmethoxy)benzoyl]amino]propyl]amino]-2-oxobutyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

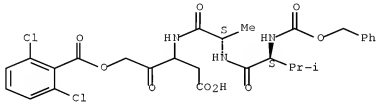


RN 151544-40-0 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[3-[(2,6-dichlorobenzoyl)oxy]-1-(2-ethoxy-2-oxoethyl)-2-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)



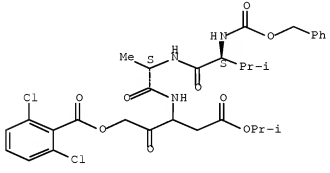
RN 151544-42-2 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[1-(carboxymethyl)-3-[(2,6-dichlorobenzoyl)oxy]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



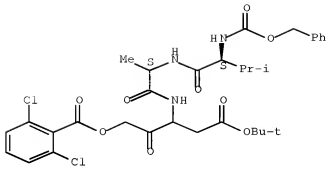
RN 151544-43-3 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[3-[(2,6-dichlorobenzoyl)oxy]-1-[2-(1-methylethoxy)-2-oxoethyl]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



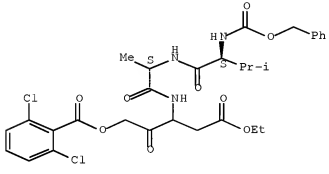
RN 151544-44-4 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[3-[(2,6-dichlorobenzoyl)oxy]-1-[2-(1,1-dimethylethoxy)-2-oxoethyl]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



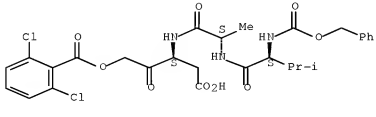
RN 151594-00-2 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[3-[(2,6-dichlorobenzoyl)oxy]-1-(2-ethoxy-2-oxoethyl)-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 151594-01-3 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[(1S)-1-(carboxymethyl)-3-[(2,6-dichlorobenzoyl)oxy]-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

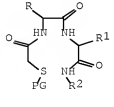
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:467645 CAPLUS Full-text
DOCUMENT NUMBER: 115:67645
ORIGINAL REFERENCE NO.: 115:11587a,11590a
TITLE: Thiotriaza chelating compounds for metal-radionuclide labeled proteins, carbohydrates, and glycoproteins for diagnosis and therapy
INVENTOR(S): Fritzberg, Alan R.; Kasina, Sudhakar; Rao, Tripuraneni N.; Vander-Heyden, Jean Luc; Srinivasan, Ananthachari
PATENT ASSIGNEE(S): NeoRx Corp., USA
SOURCE: U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 31,440, abandoned
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4965392	A	19901023	US 1988-172004	19880323 <--
DK 8801654	A	19880927	DK 1988-1654	19880325 <--
AU 8813751	A	19880929	AU 1988-13751	19880325 <--
AU 619738	B2	19920206		
CN 1034545	A	19890809	CN 1988-102772	19880325 <--
CA 1328147	C	19940329	CA 1988-562452	19880325 <--
JP 01019058	A	19890123	JP 1988-70902	19880326 <--
US 5091514	A	19920225	US 1990-494191	19900315 <--
US 5681927	A	19971028	US 1993-75305	19930611 <--
US 5616692	A	19970401	US 1995-436961	19950508 <--

PRIORITY APPLN. INFO.:
US 1987-31440 B2 19870326 <--
US 1988-172004 A3 19880323 <--
US 1990-494076 B1 19900315 <--
US 1990-494191 A1 19900315 <--
US 1991-800535 B1 19911127 <--
US 1993-152272 B1 19931112 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 115:67645
GI



I

AB N3S multidentate chelates [e.g. I; PG = THP (tetrahydropranyl), EOE (ethoxyethyl), iso-PrCO, ACM (acetamidomethyl), MOM (methoxymethyl); R = H, CH2CO2H, (CH2)2CO2H, (CH2)3CO2TFP (TFP = 2,3,5,6-tetrafluorophenyl); R1 = H,

CH2CO2H; R2 = CO2TFP, (CH2)2CO2TFP, CO2H] are provided for conjugation to polypeptides, carbohydrates, and glycoproteins for use in diagnosis and therapy. Gly-Gly-Gly was reacted with benzoyl-protected thioglycolic acid succinate ester. The product was treated with 99mTc-pertechnetate to give 90-95% 99mTc-mercaptoacetyl-Gly-Gly-Gly(99mTc-MAG3). The complex was esterified with TFP and the ester was conjugated with antimelanoma IgG. 99mTc-MAG3-NRML-05 Fab (labeled Fab fragments of monoclonal anti-melanoma antibody NRML-05) targeted melanoma xenographs in nude mice. Low liver and spleen concns. indicated good excretion patterns. Low stomach levels indicated high stability, since loss of 99mTc as pertechnetate is seen as a relatively high level of radioactivity in stomach tissue.

IC ICM C07C069-62
ICS C07C327-06

INCL 558254000

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 34, 78

ST thiotriaza chelate protein carbohydrate conjugate; radiotherapy thiotriaza chelate protein conjugate; diagnosis thiotriaza chelate protein conjugate; glycoprotein chelate thiotriaza chelate; melanoma antibody technetium chelate conjugate

IT Melanoma
(targeting of, with monoclonal antibody labeled with technetium-99m-thiotriaza chelate)

IT Diagnosis
Radiotherapy
Scintigraphy
(targeting proteins and carbohydrates labeled with thiotriaza-radionuclide chelates for)

IT Chelating agents
(thiotriaza, for labeling proteins and carbohydrates for diagnosis and therapy)

IT Immunoglobulins
RL: BIOL (Biological study)
(G, conjugates with technetium-99m thiotriaza chelate, for melanoma targeting)

IT Carbohydrates and Sugars, compounds
Glycoproteins, specific or class
Proteins, specific or class
RL: BIOL (Biological study)
(conjugates, with thiotriaza-radionuclide chelates, for diagnosis and therapy)

IT Antibodies
RL: SPN (Synthetic preparation); PREP (Preparation)
(monoclonal, conjugates with technetium-99m-radiolabeled thiotriaza chelate, preparation of and melanoma targeting with)

IT 121557-36-6 121557-39-9 121557-40-2 121557-41-3
121557-42-4 121557-43-5 135154-40-4 135154-42-6
135154-43-7
RL: BIOL (Biological study)
(as chelating agent for labeling proteins and carbohydrates for diagnosis and therapy)

IT 87-69-4DP, 99Tc complex compds., thiotriaza chelates, monoclonal antibody conjugates 14133-76-7DP, glycines complex compds., thiotriaza chelates, monoclonal antibody conjugates 135154-41-5DP, monoclonal antibody conjugates, radiolabeled with technetium 99m
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and melanoma targeting with)

IT 121557-52-6P
RL: SPN (Synthetic preparation); PREP (Preparation)

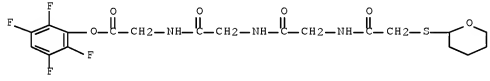
(preparation of, as chelating agent for labeling proteins and carbohydrates for diagnosis and therapy)

IT 121557-48-0P 121557-49-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate in chelating agent preparation)

IT 121557-52-6DP, 99Tc complex compds., antimelanoma IgG conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for melanoma targeting)

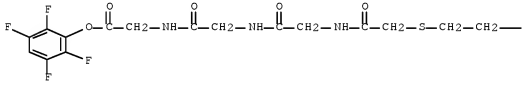
IT 121557-36-6 135154-42-6
RL: BIOL (Biological study)
(as chelating agent for labeling proteins and carbohydrates for diagnosis and therapy)

RN 121557-36-6 CAPLUS
CN Glycine, N-[N-[N-[[(tetrahydro-2H-pyran-2-yl)thio]acetyl]glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)



RN 135154-42-6 CAPLUS
CN Glycine, N-[N-[N-[[(2-ethoxyethyl)thio]acetyl]glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

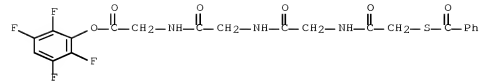


PAGE 1-B

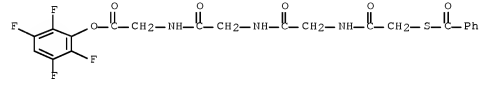
—OEt

IT 121557-52-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent for labeling proteins and carbohydrates for diagnosis and therapy)

RN 121557-52-6 CAPLUS
CN Glycine, N-[2-(benzoylthio)acetyl]glycylglycyl-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)



IT 121557-52-6DP, 99Tc complex compds., antimelanoma IgG conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for melanoma targeting)
RN 121557-52-6 CAPLUS
CN Glycine, N-[2-(benzoylthio)acetyl]glycylglycyl-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 38 THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)
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L22 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:135334 CAPLUS Full-text
DOCUMENT NUMBER: 112:135334
ORIGINAL REFERENCE NO.: 112:22793a,22796a
TITLE: Radiolabeling chelating compounds comprising sulfur atoms, with metal radionuclides
INVENTOR(S): Srinivasan, Ananthachari
PATENT ASSIGNEE(S): NeoRx Corp., USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 300431	A2	19890125	EP 1988-111612	19880719 <--
EP 300431	A3	19900627		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
US 5021556	A	19910604	US 1988-212688	19880701 <--
JP 01117857	A	19890510	JP 1988-182003	19880722 <--
PRIORITY APPLN. INFO.:			US 1987-76277 A	19870722 <--
			US 1988-212688 A	19880701 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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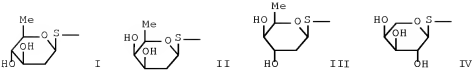


I II III IV

AB Chelating compds. comprising ≥1 S donor atom attached to a S-protecting group to form a hemathioacetal group ROCR1R2S (R, R1 = alkyl; R2 = H, alkyl) are labeled with radionuclides for use in radiodiagnosis. The S-protecting group is EtOCH2CH2 and the hemithioacetal is EtOCHMeS. I-IV are other suitable hemiacetal groups. 1,3-Dicyclohexylcarbodiimide was added to a solution of 4,5-bis[S-(1-ethoxyethyl)thioacetamido]pentanoic acid (preparation given) and 2,3,5,6-tetrafluorophenol in THF, to give 2,3,5,6-tetrafluorophenyl 4,5-bis[S-(1- ethoxyethyl)thioacetamido]pentanoate. Radiolabeling with e.g. 99mTc is conducted at acidic pH and the protecting groups are displaced during the reaction, with the formation of bonds between the S atom and radionuclide.

IC ICM A61K049-02

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 63

ST chelating compd radiolabeling diagnostic agent

IT Radioelements, uses and miscellaneous
RL: USES (Uses)
(chelating agents labeled with, sulfur-containing, for diagnostic and therapeutic uses)

IT Radiotherapy
(radiolabeled sulfur-containing chelators for)

IT Chelating agents
(sulfur-containing, radiolabeled, for therapeutic and diagnostic uses)

IT Diagnosis
(radio-, radiolabeled sulfur-containing chelators for)

IT 13982-38-2, reactions 14119-06-3, reactions 14133-76-7, reactions 14993-65-8, reactions 15690-69-4, reactions 17239-87-1, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(chelating agent labeling with, for therapeutic and diagnostic uses)

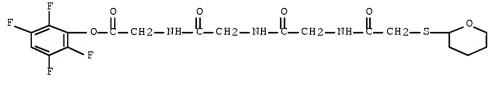
IT 6398-09-0P 105655-72-9P 125488-64-4P 125488-66-6P 125488-67-7P 125488-73-5P 125503-35-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, for diagnostic and therapeutic radiolabeled chelator preparation)

IT 125488-72-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent for diagnostic and therapeutic radionuclides)

IT 121557-36-6P 125488-74-6P 125488-75-7P 125488-76-8P 125488-77-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent, for diagnostic and therapeutic radioneuclides)

IT 125488-70-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent, for diagnostic and

therapeutic radionuclides)
IT 125488-81-5P 125488-82-6P 125517-87-5P 125517-88-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent, for therapeutic and diagnostic radionuclides)
IT 23288-60-0
RL: BIOL (Biological study)
(radiolabeling by, of sulfur-containing chelating agent)
IT 125845-39-8
RL: BIOL (Biological study)
(radiolabeling by, of sulfur-containing chelating agents)
IT 121557-36-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as chelating agent, for diagnostic and therapeutic radioneuclides)
RN 121557-36-6 CAPLUS
CN Glycine, N-[N-[N-[[(tetrahydro-2H-pyran-2-yl)thio]acetyl]glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L22 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1989:453446 CAPLUS Full-text
DOCUMENT NUMBER: 111:53446
ORIGINAL REFERENCE NO.: 111:9017a,9020a
TITLE: Metal-radionuclide-labeled proteins and glycoproteins and their preparation for kiagnosis and therapy
INVENTOR(S): Fritzberg, Alan R.; Kasina, Sudhakar; Vanderheyden, Jean Luc; Srinivasan, Ananthachari
PATENT ASSIGNEE(S): NeoRx Corp., USA
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 284071	A2	19880928	EP 1988-104755	19880324 <--
EP 284071	A3	19900516		
EP 284071	B1	19940608		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 106898	T	19940615	AT 1988-104755	19880324 <--
DK 8801654	A	19880927	DK 1988-1654	19880325 <--
AU 8813751	A	19880929	AU 1988-13751	19880325 <--
AU 619738	B2	19920206		
CN 1034545	A	19890809	CN 1988-102772	19880325 <--
CA 1328147	C	19940329	CA 1988-562452	19880325 <--

JP 01019058 A 19890123 JP 1988-70902 19880326 <--
PRIORITY APPLN. INFO.: US 1987-31440 A 19870326 <--
EP 1988-104755 A 19880324 <--
OTHER SOURCE(S): MARPAT 111:53446
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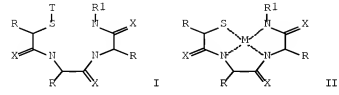


I II

AB Metal thiotriaza chelating compds. I [T = H, S protecting group; X = H2, O; R = H, nonalkyl amino acid side chain (≠ cysteine), alkyl, geminal dialkyl, (CH2)nZ; Z = CO2H, conjugation group, targeting compound; n = 1-4; R1 = H2, (CH2)nZ, polar group(s) substituted alkyl; where the compound has ≥1 (CH2)nZ group] and chelates II (M = radionuclide; the rest as above) are prepared and conjugated to proteins, glycoproteins, carbohydrates, or their fragments for use in diagnosis and therapy. Gly-Gly-Gly was reacted with benzoyl-protected thioglycolic acid succinimidate ester. The product was treated with 99mTc-pertechnetate to give 90-95% 99mTc-mercapto-Gly-Gly-Gly. The complex was esterified with 2,3,5,6-tetrafluorophenol and the ester was conjugated with antimelanoma IgG. Nude mice bearing melanoma xenographs were injected with the labeled conjugate. After 20 h the tumor had the highest percentage dose per g tissue. Low liver and spleen concns. (0.26, each) indicated good excretion patterns. Low stomach levels (0.23) indicated high stability, since loss of 99mTc as pertechnetate is seen as relatively high levels of radioactivity in stomach tissue.

IC ICM C07K015-00
ICS C07K005-08; C07B059-00; A61K043-00; A61K049-02; G01N033-534

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 34, 78

ST radionuclide thiotriaza chelate protein conjugate diagnosis; glycoprotein radionuclide thiotriaza chelate conjugate; carbohydrate radionuclide thiotriaza chelate conjugate; melanoma antibody technetium chelate conjugate

IT Glycols, biological studies
RL: SPN (Synthetic preparation); PREP (Preparation)
(cleaving agents for, in glycoprotein-thiotriaza chelator conjugates preparation)

IT Neoplasm
(diagnosis of, antibody-thiotriaza-radionuclide chelate conjugates for)

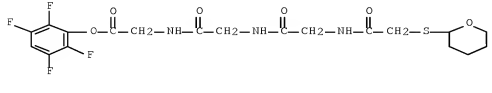
IT Cell
(targeting agent for, conjugates with thiotriaza-radionuclide chelate, for diagnosis and therapy)

IT Neoplasm inhibitors
(targeting compound-thiotriaza-radionuclide chelate conjugates)

IT Diagnosis
(targeting compound-thiotriaza-radionuclide chelate conjugates for)

IT Melanoma
(targeting of, with IgG conjugates with technetium-99m-thiotriaza

chelate)
IT Immunoglobulins
RL: BIOL (Biological study)
(G, conjugates, with technetium-99m-thiotriaza chelate, melanoma targeting with)
IT Carbohydrates and Sugars, compounds
Glycoproteins, specific or class
Peptides, compounds
Proteins, specific or class
RL: BIOL (Biological study)
(conjugates, with thiotriaza-radionuclide chelates, for diagnosis and therapy)
IT Antibodies
RL: BIOL (Biological study)
(monoclonal, conjugates with thiotriaza-radionuclide chelates , for diagnosis and therapy)
IT 121557-36-6 121557-37-7 121557-38-8 121557-39-9
121557-40-2 121557-41-3 121557-42-4 121557-43-5 121557-44-6
RL: BIOL (Biological study)
(as chelating agents for labeling proteins and glycoproteins for diagnosis and therapy)
IT 10043-49-9D, Gold-198, thiotriaza chelates, conjugates
13981-25-4D, Copper-64, thiotriaza chelates, conjugates
14378-26-8D, Rhenium-188, thiotriaza chelates, conjugates
14687-25-3D, Lead-203, thiotriaza chelates, conjugates
14913-49-6D, Bismuth-212, thiotriaza chelates, conjugates
14981-64-7D, Palladium-109, thiotriaza chelates, conjugates
14998-63-1D, Rhenium-186, thiotriaza chelates, conjugates
15092-94-1D, Lead-212, thiotriaza chelates, conjugates
15757-86-5D, Copper-67, thiotriaza chelates, conjugates
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for diagnosis and therapy)
IT 14133-76-7D, Technetium-99, thiotriaza chelates, conjugates
RL: BIOL (Biological study)
(metastable, for diagnosis and therapy)
IT 121557-52-6P 121557-53-7P 121557-56-0P
121557-58-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn of)
IT 121557-57-1DP, technetium-99 complexes
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with antimelanoma IgG)
IT 121557-36-6 121557-37-7
RL: BIOL (Biological study)
(as chelating agents for labeling proteins and glycoproteins for diagnosis and therapy)
RN 121557-36-6 CAPLUS
CN Glycine, N-[N-[N-[[(tetrahydro-2H-pyran-2-yl)thio]acetyl]glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)



RN 121557-37-7 CAPLUS
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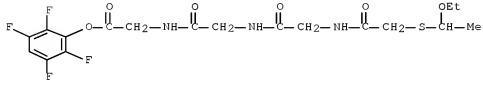
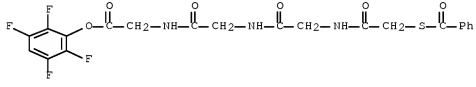
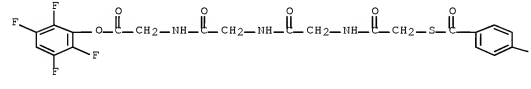


IT 121557-52-6P 121557-53-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn of)
RN 121557-52-6 CAPLUS
CN Glycine, N-[2-(benzoylthio)acetyl]glycylglycyl-, 2,3,5,6-tetrafluorophenyl ester (CA INDEX NAME)

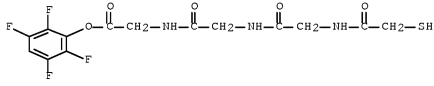


RN 121557-53-7 CAPLUS
CN Glycine, N-[N-[N-[[4-[(1,1-dimethylethoxy)carbonyl]benzoyl]thio]acetyl]glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



IT 121557-57-1DP, technetium-99 complexes
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with antimelanoma IgG)
RN 121557-57-1 CAPLUS
CN Glycine, N-[N-[N-(mercaptoacetyl)glycyl]glycyl]-, 2,3,5,6-tetrafluorophenyl ester (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

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(FILE 'HOME' ENTERED AT 11:29:10 ON 28 DEC 2009)

FILE 'CAPLUS' ENTERED AT 11:29:16 ON 28 DEC 2009
E US2006-530646/APPS
L1 2 SEA SPE=ON ABB=ON PLU=ON (US2006-530646/AP OR US2006-530646/PRN)
D SCA TI
L2 1 SEA SPE=ON ABB=ON PLU=ON L1 AND WINN D?/AU
SEL RN

FILE 'REGISTRY' ENTERED AT 11:29:52 ON 28 DEC 2009
L3 22 SEA SPE=ON ABB=ON PLU=ON (10436-25-6/BI OR 118253-03-5/BI OR 153088-76-7/BI OR 246256-50-8/BI OR 254750-84-0/BI OR 254751-09-2/BI OR 254751-10-5/BI OR 5545-52-8/BI OR 681447-85-8/BI OR 681447-86-9/BI OR 681447-88-1/BI OR 681447-89-2/BI OR 681812-81-7/BI OR 681812-82-8/BI OR 681812-83-9/BI OR 681812-84-0/BI OR 681812-85-1/BI OR 681812-86-2/BI OR 681812-87-3/BI OR 681812-88-4/BI OR 681812-89-5/BI OR 769-39-1/BI)
E BIOTIN/CN
L4 1 SEA SPE=ON ABB=ON PLU=ON BIOTIN/CN
D SCA
E DIGOXIGENIN/CN
L5 1 SEA SPE=ON ABB=ON PLU=ON DIGOXIGENIN/CN

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                D SCA
                E MALTOSE/CN
L6            1 SEA SPE=ON  ABB=ON  PLU=ON  MALTOSE/CN
                D SCA
                E PHENYLARSENATE/CN
L7            1 SEA SPE=ON  ABB=ON  PLU=ON  "PHENYLARSENIC DICHLORIDE"/CN
                D SCA
                E OLIGOHISTIDINE/CN
                E 2,4-DINITROBENZENE/CN
                D SCA
                E DETHIOBIOTIN/CN
L8            1 SEA SPE=ON  ABB=ON  PLU=ON  DETHIOBIOTIN/CN
                D SCA

    FILE 'STNGUIDE' ENTERED AT 12:10:52 ON 28 DEC 2009

    FILE 'REGISTRY' ENTERED AT 12:32:58 ON 28 DEC 2009
L9              STR
L10           5 SEA SSS SAM L9
L11        1066 SEA SSS FUL L9

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L12         198 SEA SPE=ON  ABB=ON  PLU=ON  L11

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L13          14 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND L3
L14             STR
L15          50 SEA SSS SAM L14
L16       47888 SEA SSS FUL L14

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L17          10 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND L16
L18           1 SEA SPE=ON  ABB=ON  PLU=ON  L17 AND L1
                D HITSTR

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                D SCA L2
L20           3 SEA SPE=ON  ABB=ON  PLU=ON  L19 AND ?FLUORES?

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                D SCA L4

    FILE 'CAPLUS' ENTERED AT 13:30:46 ON 28 DEC 2009
L21          26 SEA SPE=ON  ABB=ON  PLU=ON  L19 AND (?BIOTIN? OR ?GOXIGEN? OR
                ?MALTOS? OR ?OLIGOHIST? OR ?DINITROBENZ? OR ?ARSENA? OR
                ?CHELAT? OR ?POLYPEP? OR DNA OR SSDNA  OR DSDNA OR ?SACCHARID?
                OR HAPTEN? OR GLUTATHION? OR ?AVIDIN?)
L22          33 SEA SPE=ON  ABB=ON  PLU=ON  L20 OR L21 OR L17

    FILE 'CAPLUS' ENTERED AT 13:33:51 ON 28 DEC 2009
                D QUE L22
                D L22 IBIB ABS HITIND HITSTR TOT


    FILE HOME
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FILE CAPLUS

FILE COVERS 1907 - 28 Dec 2009 VOL 152 ISS 1
FILE LAST UPDATED: 25 Dec 2009 (20091225/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 DEC 2009 HIGHEST RN 1198748-35-4
DICTIONARY FILE UPDATES: 27 DEC 2009 HIGHEST RN 1198748-35-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE STNGUIDE
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 25, 2009 (20091225/UP).